REMARKS

A Notice of Allowance has been mailed from the USPTO for the above-referenced application. The Examiner contacted the undersigned by telephone indicating that Tables 5 and 6 were not sufficiently clear for printing the forthcoming Letters Patent. Applicants submit herewith Replacement Sheets containing Tables 5 and 6. No issue of new matter arises from this submission since the Replacement Sheets are merely clearer copies of the Tables 5 and 6 as filed.

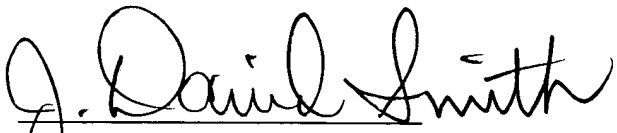
Fees

No fees are believed to be necessary in connection with this Amendment. However, if this is in error, authorization is hereby given to charge Deposit Account No. 11-1153 for any underpayment, or credit any overages.

Conclusion

If a discussion might be of assistance in resolving any issues, the Examiner is invited to telephone the undersigned.

Respectfully submitted,



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REPLACEMENT SHEET

Table 5

Atomic Structure Coordinates of the Free Form of the P/CAF Bromodomain

```
REMARK FILENAME="/bloch2/chris/BROMO_XPLOR_ARIA32/structures/it8/brd_187.pdb"
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REMARK          overall,bonds,angles,improper,vdw,noe,cdih
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REMARK violations.: 2, 0
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ATOM      1  CA  GLY     1      27.208  16.825  -6.349  1.00  0.00
ATOM      2  HA1 GLY     1      26.763  16.827  -5.365  1.00  0.00
ATOM      3  HA2 GLY     1      28.041  17.514  -6.357  1.00  0.00
ATOM      4  C   GLY     1      27.723  15.432  -6.650  1.00  0.00
ATOM      5  O   GLY     1      28.656  15.263  -7.435  1.00  0.00
ATOM      6  N   GLY     1      26.194  17.285  -7.337  1.00  0.00
ATOM      7  HT1 GLY     1      26.586  18.049  -7.923  1.00  0.00
ATOM      8  HT2 GLY     1      25.350  17.641  -6.843  1.00  0.00
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ATOM     10  N   SER     2      27.113  14.431  -6.024  1.00  0.00
ATOM     11  HN  SER     2      26.376  14.629  -5.409  1.00  0.00
ATOM     12  CA  SER     2      27.516  13.044  -6.226  1.00  0.00
ATOM     13  HA  SER     2      28.481  13.047  -6.712  1.00  0.00
ATOM     14  CB  SER     2      27.638  12.329  -4.878  1.00  0.00
ATOM     15  HB1 SER     2      26.904  12.729  -4.193  1.00  0.00
ATOM     16  HB2 SER     2      27.462  11.273  -5.017  1.00  0.00
ATOM     17  OG  SER     2      28.927  12.508  -4.319  1.00  0.00
ATOM     18  HG  SER     2      29.571  12.014  -4.832  1.00  0.00
ATOM     19  C   SER     2      26.519  12.308  -7.114  1.00  0.00
ATOM     20  O   SER     2      25.320  12.288  -6.835  1.00  0.00
ATOM     21  N   HIS     3      27.022  11.698  -8.183  1.00  0.00
ATOM     22  HN  HIS     3      27.986  11.747  -8.353  1.00  0.00
ATOM     23  CA  HIS     3      26.173  10.955  -9.106  1.00  0.00
ATOM     24  HA  HIS     3      25.157  11.295  -8.967  1.00  0.00
ATOM     25  CB  HIS     3      26.594  11.222 -10.553  1.00  0.00
ATOM     26  HB1 HIS     3      26.616  12.288 -10.723  1.00  0.00
ATOM     27  HB2 HIS     3      27.581  10.814 -10.714  1.00  0.00
ATOM     28  CG  HIS     3      25.671  10.612 -11.561  1.00  0.00
ATOM     29  ND1 HIS     3      25.985  10.494 -12.900  1.00  0.00
ATOM     30  HD1 HIS     3      26.820  10.790 -13.320  1.00  0.00
ATOM     31  CD2 HIS     3      24.433  10.080 -11.420  1.00  0.00
ATOM     32  HD2 HIS     3      23.870  10.003 -10.501  1.00  0.00
ATOM     33  CE1 HIS     3      24.981   9.918 -13.537  1.00  0.00
ATOM     34  HE1 HIS     3      24.945   9.698 -14.594  1.00  0.00
ATOM     35  NE2 HIS     3      24.028   9.658 -12.662  1.00  0.00
ATOM     36  HE2 HIS     3      23.171   9.230 -12.868  1.00  0.00
ATOM     37  C   HIS     3      26.233   9.459  -8.817  1.00  0.00
ATOM     38  O   HIS     3      26.214   8.638  -9.734  1.00  0.00
ATOM     39  N   MET     4      26.305   9.111  -7.536  1.00  0.00
ATOM     40  HN  MET     4      26.314   9.811  -6.850  1.00  0.00
ATOM     41  CA  MET     4      26.364   7.713  -7.128  1.00  0.00
ATOM     42  HA  MET     4      26.164   7.105  -7.998  1.00  0.00
ATOM     43  CB  MET     4      27.755   7.374  -6.591  1.00  0.00
ATOM     44  HB1 MET     4      28.456   8.117  -6.944  1.00  0.00
ATOM     45  HB2 MET     4      27.730   7.400  -5.512  1.00  0.00
ATOM     46  CG  MET     4      28.254   6.005  -7.024  1.00  0.00
ATOM     47  HG1 MET     4      27.433   5.306  -6.972  1.00  0.00
ATOM     48  HG2 MET     4      28.606   6.071  -8.043  1.00  0.00
ATOM     49  SD  MET     4      29.597   5.394  -5.988  1.00  0.00
ATOM     50  CE  MET     4      28.922   3.825  -5.449  1.00  0.00
ATOM     51  HE1 MET     4      29.243   3.623  -4.438  1.00  0.00
ATOM     52  HE2 MET     4      29.273   3.039  -6.102  1.00  0.00
ATOM     53  HE3 MET     4      27.843   3.866  -5.483  1.00  0.00
ATOM     54  C   MET     4      25.310   7.413  -6.067  1.00  0.00
ATOM     55  O   MET     4      25.333   7.983  -4.977  1.00  0.00
ATOM     56  N   SER     5      24.386   6.517  -6.398  1.00  0.00
ATOM     57  HN  SER     5      24.422   6.098  -7.283  1.00  0.00
ATOM     58  CA  SER     5      23.321   6.141  -5.476  1.00  0.00
ATOM     59  HA  SER     5      23.780   5.750  -4.580  1.00  0.00
ATOM     60  CB  SER     5      22.479   7.366  -5.111  1.00  0.00
ATOM     61  HB1 SER     5      22.188   7.882  -6.014  1.00  0.00
ATOM     62  HB2 SER     5      23.062   8.029  -4.490  1.00  0.00
ATOM     63  OG  SER     5      21.309   6.990  -4.405  1.00  0.00
ATOM     64  HG  SER     5      21.060   7.693  -3.800  1.00  0.00
ATOM     65  C   SER     5      22.431   5.062  -6.084  1.00  0.00
ATOM     66  O   SER     5      21.471   5.362  -6.794  1.00  0.00
ATOM     67  N   LYS     6      22.756   3.805  -5.800  1.00  0.00
ATOM     68  HN  LYS     6      23.532   3.630  -5.228  1.00  0.00
ATOM     69  CA  LYS     6      21.987   2.680  -6.319  1.00  0.00
ATOM     70  HA  LYS     6      21.642   2.942  -7.308  1.00  0.00
ATOM     71  CB  LYS     6      22.869   1.433  -6.409  1.00  0.00
ATOM     72  HB1 LYS     6      22.266   0.563  -6.192  1.00  0.00
ATOM     73  HB2 LYS     6      23.655   1.508  -5.673  1.00  0.00
ATOM     74  CG  LYS     6      23.510   1.238  -7.773  1.00  0.00
ATOM     75  HG1 LYS     6      24.045   2.138  -8.041  1.00  0.00
ATOM     76  HG2 LYS     6      24.201   0.409  -7.721  1.00  0.00
ATOM     77  CD  LYS     6      22.469   0.947  -8.842  1.00  0.00
ATOM     78  HD1 LYS     6      21.794   1.787  -8.911  1.00  0.00
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ATOM     81  HE1 LYS     6      21.107  -0.129  -7.608  1.00  0.00
ATOM     82  HE2 LYS     6      20.987  -0.503  -9.327  1.00  0.00
ATOM     83  NZ  LYS     6      22.548  -1.489  -8.317  1.00  0.00
ATOM     84  HZ1 LYS     6      23.320  -1.481  -9.014  1.00  0.00
ATOM     85  HZ2 LYS     6      21.999  -2.365  -8.435  1.00  0.00
ATOM     86  HZ3 LYS     6      22.958  -1.476  -7.362  1.00  0.00
ATOM     87  C   LYS     6      20.776   2.397  -5.436  1.00  0.00
ATOM     88  O   LYS     6      20.863   1.638  -4.471  1.00  0.00
ATOM     89  N   GLU     7      19.646   3.011  -5.773  1.00  0.00
ATOM     90  HN  GLU     7      19.637   3.606  -6.552  1.00  0.00
ATOM     91  CA  GLU     7      18.420   2.825  -5.005  1.00  0.00
ATOM     92  HA  GLU     7      18.531   1.926  -4.418  1.00  0.00
ATOM     93  CB  GLU     7      18.200   4.011  -4.064  1.00  0.00
ATOM     94  HB1 GLU     7      18.505   4.916  -4.567  1.00  0.00
ATOM     95  HB2 GLU     7      17.148   4.078  -3.828  1.00  0.00
ATOM     96  CG  GLU     7      18.975   3.904  -2.761  1.00  0.00
ATOM     97  HG1 GLU     7      19.746   3.156  -2.876  1.00  0.00
ATOM     98  HG2 GLU     7      19.430   4.860  -2.548  1.00  0.00
ATOM     99  CD  GLU     7      18.095   3.515  -1.589  1.00  0.00
ATOM    100  OE1 GLU     7      17.118   4.243  -1.312  1.00  0.00
ATOM    101  OE2 GLU     7      18.383   2.483  -0.947  1.00  0.00
ATOM    102  C   GLU     7      17.215   2.662  -5.928  1.00  0.00
ATOM    103  O   GLU     7      16.278   3.461  -5.886  1.00  0.00
ATOM    104  N   PRO     8      17.218   1.617  -6.772  1.00  0.00
ATOM    105  CA  PRO     8      16.120   1.352  -7.702  1.00  0.00
ATOM    106  HA  PRO     8      15.785   2.256  -8.189  1.00  0.00
ATOM    107  CB  PRO     8      16.760   0.419  -8.727  1.00  0.00
ATOM    108  HB1 PRO     8      17.200   1.002  -9.523  1.00  0.00
ATOM    109  HB2 PRO     8      16.011  -0.245  -9.130  1.00  0.00
ATOM    110  CG  PRO     8      17.796  -0.327  -7.958  1.00  0.00
ATOM    111  HG1 PRO     8      17.357  -1.205  -7.508  1.00  0.00
ATOM    112  HG2 PRO     8      18.607  -0.608  -8.614  1.00  0.00
ATOM    113  CD  PRO     8      18.294   0.613  -6.889  1.00  0.00
ATOM    114  HD1 PRO     8      18.429   0.085  -5.956  1.00  0.00
ATOM    115  HD2 PRO     8      19.220   1.076  -7.197  1.00  0.00
ATOM    116  C   PRO     8      14.938   0.669  -7.021  1.00  0.00
ATOM    117  O   PRO     8      13.782   0.924  -7.360  1.00  0.00
ATOM    118  N   ARG     9      15.236  -0.196  -6.057  1.00  0.00
ATOM    119  HN  ARG     9      16.176  -0.357  -5.833  1.00  0.00
ATOM    120  CA  ARG     9      14.199  -0.917  -5.328  1.00  0.00
ATOM    121  HA  ARG     9      13.522  -0.189  -4.906  1.00  0.00
ATOM    122  CB  ARG     9      13.421  -1.830  -6.279  1.00  0.00
ATOM    123  HB1 ARG     9      12.812  -2.504  -5.695  1.00  0.00
ATOM    124  HB2 ARG     9      12.778  -1.222  -6.898  1.00  0.00
ATOM    125  CG  ARG     9      14.313  -2.661  -7.188  1.00  0.00
ATOM    126  HG1 ARG     9      14.295  -2.236  -8.181  1.00  0.00
ATOM    127  HG2 ARG     9      15.322  -2.640  -6.803  1.00  0.00
ATOM    128  CD  ARG     9      13.843  -4.106  -7.262  1.00  0.00
ATOM    129  HD1 ARG     9      13.831  -4.518  -6.264  1.00  0.00
ATOM    130  HD2 ARG     9      12.844  -4.125  -7.671  1.00  0.00
ATOM    131  NE  ARG     9      14.714  -4.926  -8.102  1.00  0.00
ATOM    132  HE  ARG     9      15.302  -4.464  -8.735  1.00  0.00
ATOM    133  CZ  ARG     9      14.745  -6.255  -8.053  1.00  0.00
ATOM    134  NH1 ARG     9      13.960  -6.908  -7.208  1.00  0.00
ATOM    135 HH11 ARG     9      13.342  -6.401  -6.606  1.00  0.00
ATOM    136 HH12 ARG     9      13.985  -7.907  -7.172  1.00  0.00
ATOM    137  NH2 ARG     9      15.563  -6.932  -8.850  1.00  0.00
ATOM    138 HH21 ARG     9      16.157  -6.444  -9.489  1.00  0.00
ATOM    139 HH22 ARG     9      15.585  -7.931  -8.810  1.00  0.00
ATOM    140  C   ARG     9      14.800  -1.744  -4.196  1.00  0.00
ATOM    141  O   ARG     9      14.421  -2.897  -3.991  1.00  0.00
ATOM    142  N   ASP    10      15.732  -1.144  -3.458  1.00  0.00
ATOM    143  HN  ASP    10      15.988  -0.223  -3.673  1.00  0.00
ATOM    144  CA  ASP    10      16.393  -1.824  -2.345  1.00  0.00
ATOM    145  HA  ASP    10      17.087  -2.540  -2.760  1.00  0.00
ATOM    146  CB  ASP    10      17.169  -0.813  -1.497  1.00  0.00
ATOM    147  HB1 ASP    10      17.594  -0.061  -2.146  1.00  0.00
ATOM    148  HB2 ASP    10      16.490  -0.341  -0.802  1.00  0.00
ATOM    149  CG  ASP    10      18.292  -1.457  -0.708  1.00  0.00
ATOM    150  OD1 ASP    10      18.771  -2.532  -1.126  1.00  0.00
ATOM    151  OD2 ASP    10      18.692  -0.886   0.328  1.00  0.00
ATOM    152  C   ASP    10      15.383  -2.565  -1.468  1.00  0.00
ATOM    153  O   ASP    10      14.728  -1.961  -0.619  1.00  0.00
ATOM    154  N   PRO    11      15.249  -3.889  -1.658  1.00  0.00
ATOM    155  CA  PRO    11      14.309  -4.709  -0.887  1.00  0.00
ATOM    156  HA  PRO    11      13.311  -4.297  -0.920  1.00  0.00
ATOM    157  CB  PRO    11      14.326  -6.068  -1.607  1.00  0.00
ATOM    158  HB1 PRO    11      13.311  -6.399  -1.772  1.00  0.00
ATOM    159  HB2 PRO    11      14.849  -6.791  -0.999  1.00  0.00
ATOM    160  CG  PRO    11      15.036  -5.829  -2.899  1.00  0.00
ATOM    161  HG1 PRO    11      15.582  -6.715  -3.188  1.00  0.00
ATOM    162  HG2 PRO    11      14.324  -5.561  -3.666  1.00  0.00
ATOM    163  CD  PRO    11      15.981  -4.692  -2.646  1.00  0.00
ATOM    164  HD1 PRO    11      16.155  -4.133  -3.552  1.00  0.00
ATOM    165  HD2 PRO    11      16.911  -5.056  -2.237  1.00  0.00
ATOM    166  C   PRO    11      14.732  -4.881   0.572  1.00  0.00
ATOM    167  O   PRO    11      13.991  -5.446   1.375  1.00  0.00
ATOM    168  N   ASP    12      15.926  -4.397   0.912  1.00  0.00
ATOM    169  HN  ASP    12      16.477  -3.954   0.236  1.00  0.00
ATOM    170  CA  ASP    12      16.430  -4.508   2.276  1.00  0.00
ATOM    171  HA  ASP    12      16.402  -5.551   2.554  1.00  0.00
ATOM    172  CB  ASP    12      17.874  -4.008   2.352  1.00  0.00
ATOM    173  HB1 ASP    12      18.146  -3.873   3.389  1.00  0.00
ATOM    174  HB2 ASP    12      17.948  -3.061   1.839  1.00  0.00
ATOM    175  CG  ASP    12      18.856  -4.975   1.721  1.00  0.00
ATOM    176  OD1 ASP    12      18.870  -6.157   2.125  1.00  0.00
ATOM    177  OD2 ASP    12      19.615  -4.549   0.824  1.00  0.00
ATOM    178  C   ASP    12      15.555  -3.719   3.243  1.00  0.00
ATOM    179  O   ASP    12      14.689  -4.282   3.913  1.00  0.00
ATOM    180  N   GLN    13      15.785  -2.412   3.309  1.00  0.00
ATOM    181  HN  GLN    13      16.486  -2.020   2.748  1.00  0.00
ATOM    182  CA  GLN    13      15.012  -1.546   4.191  1.00  0.00
ATOM    183  HA  GLN    13      15.115  -1.923   5.197  1.00  0.00
ATOM    184  CB  GLN    13      15.550  -0.115   4.134  1.00  0.00
ATOM    185  HB1 GLN    13      15.055   0.411   3.331  1.00  0.00
ATOM    186  HB2 GLN    13      16.610  -0.149   3.931  1.00  0.00
ATOM    187  CG  GLN    13      15.336   0.669   5.420  1.00  0.00
ATOM    188  HG1 GLN    13      15.288  -0.025   6.246  1.00  0.00
ATOM    189  HG2 GLN    13      14.403   1.208   5.347  1.00  0.00
ATOM    190  CD  GLN    13      16.450   1.662   5.687  1.00  0.00
ATOM    191  OE1 GLN    13      16.875   2.391   4.790  1.00  0.00
ATOM    192  NE2 GLN    13      16.930   1.695   6.925  1.00  0.00
ATOM    193 HE21 GLN    13      17.651   2.328   7.125  1.00  0.00
ATOM    194 HE22 GLN    13      16.543   1.085   7.587  1.00  0.00
ATOM    195  C   GLN    13      13.538  -1.566   3.807  1.00  0.00
ATOM    196  O   GLN    13      12.658  -1.499   4.666  1.00  0.00
ATOM    197  N   LEU    14      13.278  -1.666   2.509  1.00  0.00
ATOM    198  HN  LEU    14      14.025  -1.723   1.877  1.00  0.00
ATOM    199  CA  LEU    14      11.914  -1.713   1.999  1.00  0.00
ATOM    200  HA  LEU    14      11.445  -0.764   2.212  1.00  0.00
ATOM    201  CB  LEU    14      11.939  -1.932   0.481  1.00  0.00
ATOM    202  HB1 LEU    14      12.218  -1.001   0.012  1.00  0.00
ATOM    203  HB2 LEU    14      12.702  -2.664   0.261  1.00  0.00
ATOM    204  CG  LEU    14      10.625  -2.407  -0.145  1.00  0.00
ATOM    205  HG  LEU    14       9.801  -1.900   0.333  1.00  0.00
ATOM    206  CD1 LEU    14      10.592  -2.066  -1.628  1.00  0.00
ATOM    207 HD11 LEU    14      11.506  -2.403  -2.095  1.00  0.00
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ATOM    209 HD13 LEU    14       9.749  -2.556  -2.091  1.00  0.00
ATOM    210  CD2 LEU    14      10.444  -3.902   0.064  1.00  0.00
ATOM    211 HD21 LEU    14      11.402  -4.354   0.275  1.00  0.00
ATOM    212 HD22 LEU    14      10.026  -4.344  -0.828  1.00  0.00
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ATOM    214  C   LEU    14      11.121  -2.822   2.688  1.00  0.00
ATOM    215  O   LEU    14      10.019  -2.595   3.188  1.00  0.00
ATOM    216  N   TYR    15      11.697  -4.018   2.715  1.00  0.00
ATOM    217  HN  TYR    15      12.579  -4.131   2.303  1.00  0.00
ATOM    218  CA  TYR    15      11.061  -5.167   3.350  1.00  0.00
ATOM    219  HA  TYR    15      10.125  -5.357   2.843  1.00  0.00
ATOM    220  CB  TYR    15      11.964  -6.394   3.218  1.00  0.00
ATOM    221  HB1 TYR    15      12.163  -6.569   2.173  1.00  0.00
ATOM    222  HB2 TYR    15      12.896  -6.200   3.728  1.00  0.00
ATOM    223  CG  TYR    15      11.374  -7.659   3.798  1.00  0.00
ATOM    224  CD1 TYR    15      12.076  -8.408   4.734  1.00  0.00
ATOM    225  HD1 TYR    15      13.051  -8.070   5.053  1.00  0.00
ATOM    226  CD2 TYR    15      10.121  -8.111   3.402  1.00  0.00
ATOM    227  HD2 TYR    15       9.564  -7.543   2.671  1.00  0.00
ATOM    228  CE1 TYR    15      11.542  -9.565   5.268  1.00  0.00
ATOM    229  HE1 TYR    15      12.102 -10.132   5.998  1.00  0.00
ATOM    230  CE2 TYR    15       9.582  -9.269   3.929  1.00  0.00
ATOM    231  HE2 TYR    15       8.606  -9.604   3.610  1.00  0.00
ATOM    232  CZ  TYR    15      10.296  -9.993   4.860  1.00  0.00
ATOM    233  OH  TYR    15       9.761 -11.145   5.388  1.00  0.00
ATOM    234  HH  TYR    15      10.392 -11.863   5.295  1.00  0.00
ATOM    235  C   TYR    15      10.776  -4.888   4.821  1.00  0.00
ATOM    236  O   TYR    15       9.750  -5.307   5.356  1.00  0.00
ATOM    237  N   SER    16      11.694  -4.181   5.471  1.00  0.00
ATOM    238  HN  SER    16      12.487  -3.869   4.989  1.00  0.00
ATOM    239  CA  SER    16      11.535  -3.836   6.878  1.00  0.00
ATOM    240  HA  SER    16      11.318  -4.746   7.420  1.00  0.00
ATOM    241  CB  SER    16      12.824  -3.220   7.425  1.00  0.00
ATOM    242  HB1 SER    16      13.672  -3.768   7.042  1.00  0.00
ATOM    243  HB2 SER    16      12.889  -2.189   7.111  1.00  0.00
ATOM    244  OG  SER    16      12.852  -3.268   8.841  1.00  0.00
ATOM    245  HG  SER    16      13.743  -3.471   9.137  1.00  0.00
ATOM    246  C   SER    16      10.373  -2.867   7.061  1.00  0.00
ATOM    247  O   SER    16       9.746  -2.824   8.120  1.00  0.00
ATOM    248  N   THR    17      10.087  -2.096   6.017  1.00  0.00
ATOM    249  HN  THR    17      10.615  -2.189   5.195  1.00  0.00
ATOM    250  CA  THR    17       8.983  -1.146   6.049  1.00  0.00
ATOM    251  HA  THR    17       8.965  -0.685   7.025  1.00  0.00
ATOM    252  CB  THR    17       9.182  -0.061   4.982  1.00  0.00
ATOM    253  HB  THR    17       9.393  -0.537   4.037  1.00  0.00
ATOM    254  OG1 THR    17      10.278   0.771   5.316  1.00  0.00
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REPLACEMENT SHEET

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ATOM    255  HG1 THR  17      10.098   1.223   6.144  1.00  0.00
ATOM    256  CG2 THR  17       7.971   0.832   4.783  1.00  0.00
ATOM    257 HG21 THR  17       7.078   0.224   4.720  1.00  0.00
ATOM    258 HG22 THR  17       8.088   1.395   3.867  1.00  0.00
ATOM    259 HG23 THR  17       7.883   1.513   5.616  1.00  0.00
ATOM    260  C   THR  17       7.662  -1.866   5.821  1.00  0.00
ATOM    261  O   THR  17       6.756  -1.792   6.646  1.00  0.00
ATOM    262  N   LEU  18       7.574  -2.569   4.697  1.00  0.00
ATOM    263  HN  LEU  18       8.339  -2.578   4.083  1.00  0.00
ATOM    264  CA  LEU  18       6.369  -3.302   4.330  1.00  0.00
ATOM    265  HA  LEU  18       5.555  -2.597   4.289  1.00  0.00
ATOM    266  CB  LEU  18       6.550  -3.928   2.955  1.00  0.00
ATOM    267  HB1 LEU  18       7.307  -4.694   3.026  1.00  0.00
ATOM    268  HB2 LEU  18       5.619  -4.389   2.661  1.00  0.00
ATOM    269  CG  LEU  18       6.964  -2.940   1.875  1.00  0.00
ATOM    270  HG  LEU  18       7.969  -2.603   2.075  1.00  0.00
ATOM    271  CD1 LEU  18       6.954  -3.607   0.510  1.00  0.00
ATOM    272 HD11 LEU  18       7.945  -3.963   0.274  1.00  0.00
ATOM    273 HD12 LEU  18       6.640  -2.894  -0.236  1.00  0.00
ATOM    274 HD13 LEU  18       6.270  -4.442   0.524  1.00  0.00
ATOM    275  CD2 LEU  18       6.048  -1.722   1.899  1.00  0.00
ATOM    276 HD21 LEU  18       5.138  -1.963   2.430  1.00  0.00
ATOM    277 HD22 LEU  18       5.811  -1.428   0.889  1.00  0.00
ATOM    278 HD23 LEU  18       6.549  -0.908   2.401  1.00  0.00
ATOM    279  C   LEU  18       6.037  -4.376   5.349  1.00  0.00
ATOM    280  O   LEU  18       4.961  -4.372   5.942  1.00  0.00
ATOM    281  N   LYS  19       6.956  -5.310   5.541  1.00  0.00
ATOM    282  HN  LYS  19       7.802  -5.262   5.048  1.00  0.00
ATOM    283  CA  LYS  19       6.753  -6.372   6.514  1.00  0.00
ATOM    284  HA  LYS  19       5.946  -6.995   6.158  1.00  0.00
ATOM    285  CB  LYS  19       8.029  -7.225   6.635  1.00  0.00
ATOM    286  HB1 LYS  19       8.522  -7.243   5.674  1.00  0.00
ATOM    287  HB2 LYS  19       7.748  -8.232   6.897  1.00  0.00
ATOM    288  CG  LYS  19       9.033  -6.730   7.669  1.00  0.00
ATOM    289  HG1 LYS  19       8.693  -7.018   8.653  1.00  0.00
ATOM    290  HG2 LYS  19       9.096  -5.653   7.608  1.00  0.00
ATOM    291  CD  LYS  19      10.412  -7.319   7.429  1.00  0.00
ATOM    292  HD1 LYS  19      10.559  -7.440   6.365  1.00  0.00
ATOM    293  HD2 LYS  19      11.156  -6.643   7.823  1.00  0.00
ATOM    294  CE  LYS  19      10.567  -8.671   8.106  1.00  0.00
ATOM    295  HE1 LYS  19       9.987  -9.401   7.560  1.00  0.00
ATOM    296  HE2 LYS  19      10.193  -8.598   9.117  1.00  0.00
ATOM    297  NZ  LYS  19      11.988  -9.115   8.146  1.00  0.00
ATOM    298  HZ1 LYS  19      12.044 -10.147   8.030  1.00  0.00
ATOM    299  HZ2 LYS  19      12.418  -8.855   9.057  1.00  0.00
ATOM    300  HZ3 LYS  19      12.526  -8.661   7.380  1.00  0.00
ATOM    301  C   LYS  19       6.349  -5.772   7.863  1.00  0.00
ATOM    302  O   LYS  19       5.624  -6.390   8.646  1.00  0.00
ATOM    303  N   SER  20       6.797  -4.542   8.100  1.00  0.00
ATOM    304  HN  SER  20       7.346  -4.092   7.419  1.00  0.00
ATOM    305  CA  SER  20       6.482  -3.841   9.336  1.00  0.00
ATOM    306  HA  SER  20       6.548  -4.551  10.141  1.00  0.00
ATOM    307  CB  SER  20       7.481  -2.708   9.581  1.00  0.00
ATOM    308  HB1 SER  20       7.647  -2.171   8.659  1.00  0.00
ATOM    309  HB2 SER  20       8.416  -3.123   9.929  1.00  0.00
ATOM    310  OG  SER  20       6.996  -1.801  10.556  1.00  0.00
ATOM    311  HG  SER  20       7.552  -1.841  11.337  1.00  0.00
ATOM    312  C   SER  20       5.070  -3.288   9.292  1.00  0.00
ATOM    313  O   SER  20       4.188  -3.752  10.016  1.00  0.00
ATOM    314  N   ILE  21       4.851  -2.311   8.423  1.00  0.00
ATOM    315  HN  ILE  21       5.590  -1.989   7.866  1.00  0.00
ATOM    316  CA  ILE  21       3.531  -1.717   8.268  1.00  0.00
ATOM    317  HA  ILE  21       3.312  -1.154   9.164  1.00  0.00
ATOM    318  CB  ILE  21       3.477  -0.752   7.069  1.00  0.00
ATOM    319  HB  ILE  21       2.442  -0.564   6.839  1.00  0.00
ATOM    320 CG1 ILE  21       4.155  -1.368   5.846  1.00  0.00
ATOM    321 HG11 ILE  21       4.819  -0.640   5.404  1.00  0.00
ATOM    322 HG12 ILE  21       4.723  -2.227   6.152  1.00  0.00
ATOM    323 CG2 ILE  21       4.130   0.573   7.427  1.00  0.00
ATOM    324 HG21 ILE  21       3.498   1.385   7.101  1.00  0.00
ATOM    325 HG22 ILE  21       5.089   0.644   6.935  1.00  0.00
ATOM    326 HG23 ILE  21       4.268   0.630   8.496  1.00  0.00
ATOM    327  CD1 ILE  21       3.185  -1.819   4.782  1.00  0.00
ATOM    328 HD11 ILE  21       2.645  -2.684   5.134  1.00  0.00
ATOM    329 HD12 ILE  21       3.729  -2.074   3.885  1.00  0.00
ATOM    330 HD13 ILE  21       2.489  -1.022   4.568  1.00  0.00
ATOM    331  C   ILE  21       2.472  -2.801   8.095  1.00  0.00
ATOM    332  O   ILE  21       1.487  -2.838   8.823  1.00  0.00
ATOM    333  N   LEU  22       2.710  -3.715   7.164  1.00  0.00
ATOM    334  HN  LEU  22       3.520  -3.646   6.622  1.00  0.00
ATOM    335  CA  LEU  22       1.785  -4.812   6.920  1.00  0.00
ATOM    336  HA  LEU  22       0.864  -4.390   6.544  1.00  0.00
ATOM    337  CB  LEU  22       2.361  -5.772   5.874  1.00  0.00
ATOM    338  HB1 LEU  22       1.785  -6.685   5.900  1.00  0.00
ATOM    339  HB2 LEU  22       3.379  -6.000   6.147  1.00  0.00
ATOM    340  CG  LEU  22       2.360  -5.245   4.439  1.00  0.00
ATOM    341  HG  LEU  22       3.054  -4.421   4.365  1.00  0.00
ATOM    342  CD1 LEU  22       2.815  -6.329   3.474  1.00  0.00
ATOM    343 HD11 LEU  22       2.102  -6.416   2.668  1.00  0.00
ATOM    344 HD12 LEU  22       2.885  -7.271   3.997  1.00  0.00
ATOM    345 HD13 LEU  22       3.783  -6.069   3.071  1.00  0.00
ATOM    346  CD2 LEU  22       0.980  -4.733   4.057  1.00  0.00
ATOM    347 HD21 LEU  22       0.926  -3.671   4.243  1.00  0.00
ATOM    348 HD22 LEU  22       0.234  -5.242   4.647  1.00  0.00
ATOM    349 HD23 LEU  22       0.803  -4.924   3.008  1.00  0.00
ATOM    350  C   LEU  22       1.493  -5.568   8.214  1.00  0.00
ATOM    351  O   LEU  22       0.340  -5.862   8.525  1.00  0.00
ATOM    352  N   GLN  23       2.546  -5.868   8.971  1.00  0.00
ATOM    353  HN  GLN  23       3.447  -5.617   8.666  1.00  0.00
ATOM    354  CA  GLN  23       2.402  -6.598  10.226  1.00  0.00
ATOM    355  HA  GLN  23       2.066  -7.596   9.989  1.00  0.00
ATOM    356  CB  GLN  23       3.754  -6.684  10.940  1.00  0.00
ATOM    357  HB1 GLN  23       3.588  -6.635  12.006  1.00  0.00
ATOM    358  HB2 GLN  23       4.360  -5.842  10.640  1.00  0.00
ATOM    359  CG  GLN  23       4.528  -7.958  10.637  1.00  0.00
ATOM    360  HG1 GLN  23       4.592  -8.082   9.566  1.00  0.00
ATOM    361  HG2 GLN  23       5.523  -7.865  11.048  1.00  0.00
ATOM    362  CD  GLN  23       3.875  -9.191  11.231  1.00  0.00
ATOM    363  OE1 GLN  23       3.304  -9.141  12.320  1.00  0.00
ATOM    364  NE2 GLN  23       3.958 -10.308  10.517  1.00  0.00
ATOM    365 HE21 GLN  23       3.545 -11.120  10.879  1.00  0.00
ATOM    366 HE22 GLN  23       4.429 -10.275   9.658  1.00  0.00
ATOM    367  C   GLN  23       1.374  -5.941  11.151  1.00  0.00
ATOM    368  O   GLN  23       0.462  -6.604  11.646  1.00  0.00
ATOM    369  N   GLN  24       1.542  -4.645  11.404  1.00  0.00
ATOM    370  HN  GLN  24       2.303  -4.175  11.002  1.00  0.00
ATOM    371  CA  GLN  24       0.659  -3.920  12.317  1.00  0.00
ATOM    372  HA  GLN  24       0.434  -4.580  13.142  1.00  0.00
ATOM    373  CB  GLN  24       1.369  -2.679  12.863  1.00  0.00
ATOM    374  HB1 GLN  24       2.330  -2.973  13.260  1.00  0.00
ATOM    375  HB2 GLN  24       0.774  -2.258  13.659  1.00  0.00
ATOM    376  CG  GLN  24       1.596  -1.602  11.817  1.00  0.00
ATOM    377  HG1 GLN  24       0.680  -1.044  11.689  1.00  0.00
ATOM    378  HG2 GLN  24       1.860  -2.077  10.885  1.00  0.00
ATOM    379  CD  GLN  24       2.702  -0.638  12.200  1.00  0.00
ATOM    380  OE1 GLN  24       3.210  -0.671  13.320  1.00  0.00
ATOM    381  NE2 GLN  24       3.082   0.227  11.266  1.00  0.00
ATOM    382 HE21 GLN  24       2.633   0.195  10.395  1.00  0.00
ATOM    383 HE22 GLN  24       3.795   0.862  11.486  1.00  0.00
ATOM    384  C   GLN  24      -0.658  -3.511  11.654  1.00  0.00
ATOM    385  O   GLN  24      -1.727  -3.682  12.237  1.00  0.00
ATOM    386  N   VAL  25      -0.577  -2.936  10.456  1.00  0.00
ATOM    387  HN  VAL  25       0.298  -2.811  10.047  1.00  0.00
ATOM    388  CA  VAL  25      -1.769  -2.477   9.743  1.00  0.00
ATOM    389  HA  VAL  25      -2.139  -1.597  10.251  1.00  0.00
ATOM    390  CB  VAL  25      -1.454  -2.085   8.285  1.00  0.00
ATOM    391  HB  VAL  25      -2.344  -1.670   7.845  1.00  0.00
ATOM    392 CG1 VAL  25      -0.364  -1.025   8.239  1.00  0.00
ATOM    393 HG11 VAL  25      -0.774  -0.102   7.858  1.00  0.00
ATOM    394 HG12 VAL  25       0.434  -1.358   7.591  1.00  0.00
ATOM    395 HG13 VAL  25       0.024  -0.863   9.234  1.00  0.00
ATOM    396 CG2 VAL  25      -1.061  -3.301   7.473  1.00  0.00
ATOM    397 HG21 VAL  25      -1.924  -3.934   7.330  1.00  0.00
ATOM    398 HG22 VAL  25      -0.295  -3.848   7.997  1.00  0.00
ATOM    399 HG23 VAL  25      -0.684  -2.982   6.511  1.00  0.00
ATOM    400  C   VAL  25      -2.865  -3.536   9.760  1.00  0.00
ATOM    401  O   VAL  25      -4.042  -3.213   9.907  1.00  0.00
ATOM    402  N   LYS  26      -2.478  -4.805   9.670  1.00  0.00
ATOM    403  HN  LYS  26      -1.525  -5.013   9.579  1.00  0.00
ATOM    404  CA  LYS  26      -3.448  -5.893   9.728  1.00  0.00
ATOM    405  HA  LYS  26      -4.076  -5.827   8.852  1.00  0.00
ATOM    406  CB  LYS  26      -2.739  -7.248   9.740  1.00  0.00
ATOM    407  HB1 LYS  26      -2.064  -7.280  10.582  1.00  0.00
ATOM    408  HB2 LYS  26      -3.479  -8.026   9.853  1.00  0.00
ATOM    409  CG  LYS  26      -1.940  -7.530   8.479  1.00  0.00
ATOM    410  HG1 LYS  26      -2.552  -8.102   7.797  1.00  0.00
ATOM    411  HG2 LYS  26      -1.665  -6.591   8.020  1.00  0.00
ATOM    412  CD  LYS  26      -0.679  -8.317   8.790  1.00  0.00
ATOM    413  HD1 LYS  26      -0.295  -7.995   9.747  1.00  0.00
ATOM    414  HD2 LYS  26       0.054  -8.123   8.020  1.00  0.00
ATOM    415  CE  LYS  26      -0.955  -9.811   8.844  1.00  0.00
ATOM    416  HE1 LYS  26      -0.358 -10.245   9.632  1.00  0.00
ATOM    417  HE2 LYS  26      -2.002  -9.962   9.062  1.00  0.00
ATOM    418  NZ  LYS  26      -0.625 -10.486   7.558  1.00  0.00
ATOM    419  HZ1 LYS  26       0.302 -10.951   7.627  1.00  0.00
ATOM    420  HZ2 LYS  26      -0.595  -9.790   6.787  1.00  0.00
ATOM    421  HZ3 LYS  26      -1.345 -11.203   7.336  1.00  0.00
ATOM    422  C   LYS  26      -4.318  -5.750  10.973  1.00  0.00
ATOM    423  O   LYS  26      -5.496  -6.105  10.969  1.00  0.00
ATOM    424  N   SER  27      -3.724  -5.203  12.029  1.00  0.00
ATOM    425  HN  SER  27      -2.783  -4.928  11.957  1.00  0.00
ATOM    426  CA  SER  27      -4.437  -4.970  13.281  1.00  0.00
ATOM    427  HA  SER  27      -5.407  -5.436  13.209  1.00  0.00
ATOM    428  CB  SER  27      -3.669  -5.585  14.452  1.00  0.00
ATOM    429  HB1 SER  27      -2.861  -4.927  14.735  1.00  0.00
ATOM    430  HB2 SER  27      -3.267  -6.542  14.152  1.00  0.00
ATOM    431  OG  SER  27      -4.514  -5.777  15.573  1.00  0.00
ATOM    432  HG  SER  27      -5.402  -5.986  15.273  1.00  0.00
ATOM    433  C   SER  27      -4.643  -3.481  13.519  1.00  0.00
ATOM    434  O   SER  27      -4.887  -3.052  14.646  1.00  0.00
ATOM    435  N   HIS  28      -4.516  -2.692  12.457  1.00  0.00
ATOM    436  HN  HIS  28      -4.367  -3.088  11.578  1.00  0.00
ATOM    437  CA  HIS  28      -4.755  -1.267  12.552  1.00  0.00
ATOM    438  HA  HIS  28      -4.393  -0.936  13.515  1.00  0.00
ATOM    439  CB  HIS  28      -4.006  -0.512  11.456  1.00  0.00
ATOM    440  HB1 HIS  28      -2.948  -0.628  11.622  1.00  0.00
ATOM    441  HB2 HIS  28      -4.266  -0.930  10.496  1.00  0.00
ATOM    442  CG  HIS  28      -4.292   0.956  11.417  1.00  0.00
ATOM    443  ND1 HIS  28      -4.264   1.759  12.538  1.00  0.00
ATOM    444  HD1 HIS  28      -4.083   1.459  13.454  1.00  0.00
ATOM    445  CD2 HIS  28      -4.569   1.777  10.377  1.00  0.00
ATOM    446  HD2 HIS  28      -4.665   1.487   9.340  1.00  0.00
ATOM    447  CE1 HIS  28      -4.533   3.006  12.191  1.00  0.00
ATOM    448  HE1 HIS  28      -4.587   3.852  12.859  1.00  0.00
ATOM    449  NE2 HIS  28      -4.719   3.042  10.886  1.00  0.00
ATOM    450  HE2 HIS  28      -4.935   3.844  10.367  1.00  0.00
ATOM    451  C   HIS  28      -6.246  -1.009  12.480  1.00  0.00
ATOM    452  O   HIS  28      -6.982  -1.724  11.800  1.00  0.00
ATOM    453  N   GLN  29      -6.690  -0.037  13.241  1.00  0.00
ATOM    454  HN  GLN  29      -6.048   0.472  13.779  1.00  0.00
ATOM    455  CA  GLN  29      -8.109   0.272  13.334  1.00  0.00
ATOM    456  HA  GLN  29      -8.640  -0.668  13.358  1.00  0.00
ATOM    457  CB  GLN  29      -8.371   1.007  14.638  1.00  0.00
ATOM    458  HB1 GLN  29      -9.433   1.018  14.832  1.00  0.00
ATOM    459  HB2 GLN  29      -8.012   2.021  14.552  1.00  0.00
ATOM    460  CG  GLN  29      -7.670   0.341  15.809  1.00  0.00
ATOM    461  HG1 GLN  29      -7.180  -0.560  15.445  1.00  0.00
ATOM    462  HG2 GLN  29      -6.929   1.021  16.203  1.00  0.00
ATOM    463  CD  GLN  29      -8.622  -0.040  16.925  1.00  0.00
ATOM    464  OE1 GLN  29      -8.364   0.234  18.097  1.00  0.00
ATOM    465  NE2 GLN  29      -9.730  -0.676  16.566  1.00  0.00
ATOM    466 HE21 GLN  29      -9.870  -0.861  15.613  1.00  0.00
ATOM    467 HE22 GLN  29     -10.363  -0.935  17.267  1.00  0.00
ATOM    468  C   GLN  29      -8.607   1.069  12.132  1.00  0.00
ATOM    469  O   GLN  29      -9.794   1.378  12.034  1.00  0.00
ATOM    470  N   SER  30      -7.711   1.348  11.191  1.00  0.00
ATOM    471  HN  SER  30      -6.785   1.056  11.306  1.00  0.00
ATOM    472  CA  SER  30      -8.082   2.036   9.965  1.00  0.00
ATOM    473  HA  SER  30      -9.149   2.199   9.989  1.00  0.00
ATOM    474  CB  SER  30      -7.375   3.385   9.874  1.00  0.00
ATOM    475  HB1 SER  30      -6.453   3.269   9.324  1.00  0.00
ATOM    476  HB2 SER  30      -8.013   4.090   9.362  1.00  0.00
ATOM    477  OG  SER  30      -7.079   3.891  11.163  1.00  0.00
ATOM    478  HG  SER  30      -7.871   3.870  11.705  1.00  0.00
ATOM    479  C   SER  30      -7.743   1.184   8.740  1.00  0.00
ATOM    480  O   SER  30      -8.056   1.562   7.611  1.00  0.00
ATOM    481  N   ALA  31      -7.089   0.039   8.962  1.00  0.00
ATOM    482  HN  ALA  31      -6.867  -0.224   9.880  1.00  0.00
ATOM    483  CA  ALA  31      -6.726  -0.855   7.868  1.00  0.00
ATOM    484  HA  ALA  31      -6.413  -0.246   7.034  1.00  0.00
ATOM    485  CB  ALA  31      -5.553  -1.732   8.272  1.00  0.00
ATOM    486  HB1 ALA  31      -5.218  -2.301   7.417  1.00  0.00
ATOM    487  HB2 ALA  31      -5.865  -2.407   9.054  1.00  0.00
ATOM    488  HB3 ALA  31      -4.746  -1.111   8.629  1.00  0.00
ATOM    489  C   ALA  31      -7.906  -1.726   7.433  1.00  0.00
ATOM    490  O   ALA  31      -7.795  -2.496   6.480  1.00  0.00
ATOM    491  N   TRP  32      -9.040  -1.590   8.119  1.00  0.00
ATOM    492  HN  TRP  32      -9.072  -0.974   8.879  1.00  0.00
ATOM    493  CA  TRP  32     -10.222  -2.384   7.799  1.00  0.00
ATOM    494  HA  TRP  32      -9.960  -3.416   7.971  1.00  0.00
ATOM    495  CB  TRP  32     -11.389  -2.030   8.736  1.00  0.00
ATOM    496  HB1 TRP  32     -11.167  -2.390   9.730  1.00  0.00
ATOM    497  HB2 TRP  32     -12.289  -2.507   8.377  1.00  0.00
ATOM    498  CG  TRP  32     -11.644  -0.566   8.823  1.00  0.00
ATOM    499  CD1 TRP  32     -11.330   0.268   9.857  1.00  0.00
ATOM    500  HD1 TRP  32     -10.862  -0.052  10.776  1.00  0.00
ATOM    501  CD2 TRP  32     -12.255   0.241   7.823  1.00  0.00
ATOM    502  NE1 TRP  32     -11.699   1.554   9.549  1.00  0.00
ATOM    503  HE1 TRP  32     -11.582   2.335  10.128  1.00  0.00
ATOM    504  CE2 TRP  32     -12.259   1.564   8.298  1.00  0.00
ATOM    505  CE3 TRP  32     -12.759  -0.025   6.552  1.00  0.00
ATOM    506  HE3 TRP  32     -12.751  -1.026   6.146  1.00  0.00
ATOM    507  CZ2 TRP  32     -12.780   2.612   7.553  1.00  0.00
ATOM    508  HZ2 TRP  32     -12.798   3.627   7.923  1.00  0.00
ATOM    509  CZ3 TRP  32     -13.278   1.012   5.816  1.00  0.00
ATOM    510  HZ3 TRP  32     -13.671   0.827   4.829  1.00  0.00
ATOM    511  CH2 TRP  32     -13.284   2.314   6.317  1.00  0.00
ATOM    512  HH2 TRP  32     -13.669   3.090   5.697  1.00  0.00
ATOM    513  C   TRP  32     -10.647  -2.251   6.323  1.00  0.00
ATOM    514  O   TRP  32     -11.197  -3.202   5.769  1.00  0.00
ATOM    515  N   PRO  33     -10.400  -1.102   5.633  1.00  0.00
ATOM    516  CA  PRO  33     -10.776  -0.964   4.229  1.00  0.00
ATOM    517  HA  PRO  33     -11.746  -1.400   4.038  1.00  0.00
ATOM    518  CB  PRO  33     -10.842   0.550   3.996  1.00  0.00
ATOM    519  HB1 PRO  33     -10.273   0.798   3.113  1.00  0.00
ATOM    520  HB2 PRO  33     -11.870   0.844   3.852  1.00  0.00
ATOM    521  CG  PRO  33     -10.257   1.205   5.213  1.00  0.00
ATOM    522  HG1 PRO  33      -9.438   1.839   4.913  1.00  0.00
ATOM    523  HG2 PRO  33     -11.008   1.791   5.713  1.00  0.00
ATOM    524  CD  PRO  33      -9.749   0.125   6.125  1.00  0.00
ATOM    525  HD1 PRO  33      -8.693   0.063   6.031  1.00  0.00
ATOM    526  HD2 PRO  33     -10.014   0.330   7.146  1.00  0.00
ATOM    527  C   PRO  33      -9.748  -1.604   3.299  1.00  0.00
ATOM    528  O   PRO  33     -10.097  -2.161   2.259  1.00  0.00
ATOM    529  N   PHE  34      -8.481  -1.522   3.688  1.00  0.00
ATOM    530  HN  PHE  34      -8.271  -1.075   4.533  1.00  0.00
ATOM    531  CA  PHE  34      -7.393  -2.109   2.910  1.00  0.00
ATOM    532  HA  PHE  34      -7.546  -1.870   1.872  1.00  0.00
ATOM    533  CB  PHE  34      -6.043  -1.529   3.344  1.00  0.00
ATOM    534  HB1 PHE  34      -5.395  -1.497   2.486  1.00  0.00
ATOM    535  HB2 PHE  34      -5.608  -2.168   4.098  1.00  0.00
ATOM    536  CG  PHE  34      -6.120  -0.134   3.900  1.00  0.00
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REPLACEMENT SHEET

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ATOM    537  CD1 PHE   34      -6.997   0.794   3.361  1.00  0.00
ATOM    538  HD1 PHE   34      -7.638   0.503   2.542  1.00  0.00
ATOM    539  CD2 PHE   34      -5.300   0.255   4.946  1.00  0.00
ATOM    540  HD2 PHE   34      -4.611  -0.459   5.373  1.00  0.00
ATOM    541  CE1 PHE   34      -7.069   2.077   3.868  1.00  0.00
ATOM    542  HE1 PHE   34      -7.761   2.789   3.443  1.00  0.00
ATOM    543  CE2 PHE   34      -5.368   1.536   5.459  1.00  0.00
ATOM    544  HE2 PHE   34      -4.728   1.824   6.279  1.00  0.00
ATOM    545  CZ  PHE   34      -6.252   2.450   4.917  1.00  0.00
ATOM    546  HZ  PHE   34      -6.304   3.453   5.314  1.00  0.00
ATOM    547  C   PHE   34      -7.400  -3.624   3.053  1.00  0.00
ATOM    548  O   PHE   34      -7.293  -4.349   2.065  1.00  0.00
ATOM    549  N   MET   35      -7.543  -4.100   4.285  1.00  0.00
ATOM    550  HN  MET   35      -7.635  -3.476   5.035  1.00  0.00
ATOM    551  CA  MET   35      -7.587  -5.534   4.541  1.00  0.00
ATOM    552  HA  MET   35      -6.624  -5.948   4.283  1.00  0.00
ATOM    553  CB  MET   35      -7.868  -5.802   6.021  1.00  0.00
ATOM    554  HB1 MET   35      -8.472  -4.998   6.413  1.00  0.00
ATOM    555  HB2 MET   35      -8.415  -6.729   6.110  1.00  0.00
ATOM    556  CG  MET   35      -6.609  -5.910   6.868  1.00  0.00
ATOM    557  HG1 MET   35      -6.714  -5.267   7.730  1.00  0.00
ATOM    558  HG2 MET   35      -5.766  -5.582   6.278  1.00  0.00
ATOM    559  SD  MET   35      -6.296  -7.591   7.437  1.00  0.00
ATOM    560  CE  MET   35      -4.848  -8.011   6.470  1.00  0.00
ATOM    561  HE1 MET   35      -4.248  -8.726   7.013  1.00  0.00
ATOM    562  HE2 MET   35      -4.268  -7.119   6.285  1.00  0.00
ATOM    563  HE3 MET   35      -5.157  -8.441   5.529  1.00  0.00
ATOM    564  C   MET   35      -8.656  -6.194   3.674  1.00  0.00
ATOM    565  O   MET   35      -9.847  -5.924   3.827  1.00  0.00
ATOM    566  N   GLU   36      -8.219  -7.049   2.751  1.00  0.00
ATOM    567  HN  GLU   36      -7.255  -7.208   2.671  1.00  0.00
ATOM    568  CA  GLU   36      -9.128  -7.729   1.829  1.00  0.00
ATOM    569  HA  GLU   36      -8.598  -8.569   1.409  1.00  0.00
ATOM    570  CB  GLU   36     -10.371  -8.248   2.562  1.00  0.00
ATOM    571  HB1 GLU   36     -11.151  -7.504   2.496  1.00  0.00
ATOM    572  HB2 GLU   36     -10.122  -8.406   3.601  1.00  0.00
ATOM    573  CG  GLU   36     -10.907  -9.553   1.996  1.00  0.00
ATOM    574  HG1 GLU   36     -10.073 -10.192   1.748  1.00  0.00
ATOM    575  HG2 GLU   36     -11.473  -9.338   1.102  1.00  0.00
ATOM    576  CD  GLU   36     -11.806 -10.289   2.972  1.00  0.00
ATOM    577  OE1 GLU   36     -11.522 -11.469   3.266  1.00  0.00
ATOM    578  OE2 GLU   36     -12.794  -9.685   3.440  1.00  0.00
ATOM    579  C   GLU   36      -9.543  -6.792   0.696  1.00  0.00
ATOM    580  O   GLU   36     -10.414  -5.939   0.873  1.00  0.00
ATOM    581  N   PRO   37      -8.913  -6.929  -0.486  1.00  0.00
ATOM    582  CA  PRO   37      -9.200  -6.075  -1.644  1.00  0.00
ATOM    583  HA  PRO   37      -9.135  -5.029  -1.386  1.00  0.00
ATOM    584  CB  PRO   37      -8.087  -6.425  -2.646  1.00  0.00
ATOM    585  HB1 PRO   37      -7.650  -5.515  -3.031  1.00  0.00
ATOM    586  HB2 PRO   37      -8.504  -6.999  -3.461  1.00  0.00
ATOM    587  CG  PRO   37      -7.087  -7.224  -1.876  1.00  0.00
ATOM    588  HG1 PRO   37      -6.627  -7.957  -2.522  1.00  0.00
ATOM    589  HG2 PRO   37      -6.338  -6.570  -1.455  1.00  0.00
ATOM    590  CD  PRO   37      -7.857  -7.904  -0.784  1.00  0.00
ATOM    591  HD1 PRO   37      -7.229  -8.071   0.077  1.00  0.00
ATOM    592  HD2 PRO   37      -8.276  -8.834  -1.137  1.00  0.00
ATOM    593  C   PRO   37     -10.569  -6.357  -2.254  1.00  0.00
ATOM    594  O   PRO   37     -11.467  -6.866  -1.584  1.00  0.00
ATOM    595  N   VAL   38     -10.720  -6.015  -3.531  1.00  0.00
ATOM    596  HN  VAL   38      -9.967  -5.610  -4.008  1.00  0.00
ATOM    597  CA  VAL   38     -11.979  -6.221  -4.237  1.00  0.00
ATOM    598  HA  VAL   38     -12.777  -5.845  -3.614  1.00  0.00
ATOM    599  CB  VAL   38     -12.006  -5.450  -5.571  1.00  0.00
ATOM    600  HB  VAL   38     -11.238  -5.856  -6.213  1.00  0.00
ATOM    601  CG1 VAL   38     -11.704  -3.977  -5.342  1.00  0.00
ATOM    602 HG11 VAL   38     -12.002  -3.410  -6.212  1.00  0.00
ATOM    603 HG12 VAL   38     -10.645  -3.848  -5.174  1.00  0.00
ATOM    604 HG13 VAL   38     -12.250  -3.628  -4.479  1.00  0.00
ATOM    605  CG2 VAL   38     -13.347  -5.625  -6.266  1.00  0.00
ATOM    606 HG21 VAL   38     -13.431  -6.636  -6.639  1.00  0.00
ATOM    607 HG22 VAL   38     -13.419  -4.931  -7.090  1.00  0.00
ATOM    608 HG23 VAL   38     -14.145  -5.434  -5.563  1.00  0.00
ATOM    609  C   VAL   38     -12.222  -7.700  -4.513  1.00  0.00
ATOM    610  O   VAL   38     -11.293  -8.508  -4.492  1.00  0.00
ATOM    611  N   LYS   39     -13.477  -8.047  -4.775  1.00  0.00
ATOM    612  HN  LYS   39     -14.173  -7.357  -4.773  1.00  0.00
ATOM    613  CA  LYS   39     -13.850  -9.431  -5.053  1.00  0.00
ATOM    614  HA  LYS   39     -12.960 -10.036  -4.968  1.00  0.00
ATOM    615  CB  LYS   39     -14.898  -9.939  -4.047  1.00  0.00
ATOM    616  HB1 LYS   39     -15.855  -9.996  -4.546  1.00  0.00
ATOM    617  HB2 LYS   39     -14.615 -10.931  -3.727  1.00  0.00
ATOM    618  CG  LYS   39     -15.065  -9.072  -2.804  1.00  0.00
ATOM    619  HG1 LYS   39     -14.989  -8.033  -3.086  1.00  0.00
ATOM    620  HG2 LYS   39     -14.283  -9.315  -2.099  1.00  0.00
ATOM    621  CD  LYS   39     -16.414  -9.301  -2.144  1.00  0.00
ATOM    622  HD1 LYS   39     -17.168  -8.758  -2.693  1.00  0.00
ATOM    623  HD2 LYS   39     -16.640 -10.357  -2.164  1.00  0.00
ATOM    624  CE  LYS   39     -16.415  -8.824  -0.701  1.00  0.00
ATOM    625  HE1 LYS   39     -16.995  -9.516  -0.107  1.00  0.00
ATOM    626  HE2 LYS   39     -15.398  -8.806  -0.340  1.00  0.00
ATOM    627  NZ  LYS   39     -17.002  -7.462  -0.567  1.00  0.00
ATOM    628  HZ1 LYS   39     -17.552  -7.225  -1.417  1.00  0.00
ATOM    629  HZ2 LYS   39     -16.246  -6.758  -0.448  1.00  0.00
ATOM    630  HZ3 LYS   39     -17.630  -7.423   0.261  1.00  0.00
ATOM    631  C   LYS   39     -14.399  -9.563  -6.469  1.00  0.00
ATOM    632  O   LYS   39     -13.886 -10.337  -7.278  1.00  0.00
ATOM    633  N   ARG   40     -15.448  -8.801  -6.759  1.00  0.00
ATOM    634  HN  ARG   40     -15.810  -8.206  -6.070  1.00  0.00
ATOM    635  CA  ARG   40     -16.078  -8.826  -8.074  1.00  0.00
ATOM    636  HA  ARG   40     -15.347  -8.504  -8.800  1.00  0.00
ATOM    637  CB  ARG   40     -16.534 -10.246  -8.417  1.00  0.00
ATOM    638  HB1 ARG   40     -15.676 -10.822  -8.729  1.00  0.00
ATOM    639  HB2 ARG   40     -17.240 -10.197  -9.234  1.00  0.00
ATOM    640  CG  ARG   40     -17.198 -10.968  -7.256  1.00  0.00
ATOM    641  HG1 ARG   40     -18.190 -10.565  -7.115  1.00  0.00
ATOM    642  HG2 ARG   40     -16.612 -10.809  -6.363  1.00  0.00
ATOM    643  CD  ARG   40     -17.305 -12.462  -7.516  1.00  0.00
ATOM    644  HD1 ARG   40     -16.418 -12.788  -8.038  1.00  0.00
ATOM    645  HD2 ARG   40     -18.173 -12.645  -8.133  1.00  0.00
ATOM    646  NE  ARG   40     -17.434 -13.225  -6.277  1.00  0.00
ATOM    647  HE  ARG   40     -17.683 -12.735  -5.466  1.00  0.00
ATOM    648  CZ  ARG   40     -17.235 -14.537  -6.197  1.00  0.00
ATOM    649  NH1 ARG   40     -16.898 -15.225  -7.279  1.00  0.00
ATOM    650 HH11 ARG   40     -16.794 -14.758  -8.157  1.00  0.00
ATOM    651 HH12 ARG   40     -16.748 -16.212  -7.217  1.00  0.00
ATOM    652  NH2 ARG   40     -17.371 -15.160  -5.034  1.00  0.00
ATOM    653 HH21 ARG   40     -17.624 -14.644  -4.216  1.00  0.00
ATOM    654 HH22 ARG   40     -17.220 -16.147  -4.976  1.00  0.00
ATOM    655  C   ARG   40     -17.268  -7.874  -8.116  1.00  0.00
ATOM    656  O   ARG   40     -17.442  -7.122  -9.074  1.00  0.00
ATOM    657  N   THR   41     -18.081  -7.910  -7.065  1.00  0.00
ATOM    658  HN  THR   41     -17.886  -8.530  -6.332  1.00  0.00
ATOM    659  CA  THR   41     -19.252  -7.047  -6.971  1.00  0.00
ATOM    660  HA  THR   41     -19.528  -6.751  -7.973  1.00  0.00
ATOM    661  CB  THR   41     -20.418  -7.806  -6.335  1.00  0.00
ATOM    662  HB  THR   41     -20.623  -8.689  -6.922  1.00  0.00
ATOM    663  OG1 THR   41     -21.586  -7.003  -6.313  1.00  0.00
ATOM    664  HG1 THR   41     -21.499  -6.331  -5.634  1.00  0.00
ATOM    665  CG2 THR   41     -20.139  -8.252  -4.916  1.00  0.00
ATOM    666 HG21 THR   41     -19.793  -7.409  -4.335  1.00  0.00
ATOM    667 HG22 THR   41     -19.381  -9.020  -4.923  1.00  0.00
ATOM    668 HG23 THR   41     -21.045  -8.644  -4.477  1.00  0.00
ATOM    669  C   THR   41     -18.940  -5.797  -6.155  1.00  0.00
ATOM    670  O   THR   41     -19.562  -4.751  -6.338  1.00  0.00
ATOM    671  N   GLU   42     -17.969  -5.915  -5.254  1.00  0.00
ATOM    672  HN  GLU   42     -17.511  -6.776  -5.156  1.00  0.00
ATOM    673  CA  GLU   42     -17.570  -4.797  -4.408  1.00  0.00
ATOM    674  HA  GLU   42     -18.437  -4.480  -3.847  1.00  0.00
ATOM    675  CB  GLU   42     -16.478  -5.238  -3.432  1.00  0.00
ATOM    676  HB1 GLU   42     -15.513  -5.015  -3.864  1.00  0.00
ATOM    677  HB2 GLU   42     -16.556  -6.304  -3.279  1.00  0.00
ATOM    678  CG  GLU   42     -16.561  -4.556  -2.076  1.00  0.00
ATOM    679  HG1 GLU   42     -17.313  -5.054  -1.482  1.00  0.00
ATOM    680  HG2 GLU   42     -16.845  -3.524  -2.224  1.00  0.00
ATOM    681  CD  GLU   42     -15.246  -4.592  -1.323  1.00  0.00
ATOM    682  OE1 GLU   42     -14.293  -3.913  -1.760  1.00  0.00
ATOM    683  OE2 GLU   42     -15.169  -5.300  -0.297  1.00  0.00
ATOM    684  C   GLU   42     -17.072  -3.626  -5.249  1.00  0.00
ATOM    685  O   GLU   42     -17.374  -2.468  -4.959  1.00  0.00
ATOM    686  N   ALA   43     -16.304  -3.935  -6.288  1.00  0.00
ATOM    687  HN  ALA   43     -16.098  -4.877  -6.467  1.00  0.00
ATOM    688  CA  ALA   43     -15.762  -2.908  -7.171  1.00  0.00
ATOM    689  HA  ALA   43     -16.392  -2.035  -7.091  1.00  0.00
ATOM    690  CB  ALA   43     -14.359  -2.518  -6.730  1.00  0.00
ATOM    691  HB1 ALA   43     -14.122  -3.016  -5.801  1.00  0.00
ATOM    692  HB2 ALA   43     -14.310  -1.449  -6.587  1.00  0.00
ATOM    693  HB3 ALA   43     -13.648  -2.813  -7.487  1.00  0.00
ATOM    694  C   ALA   43     -15.753  -3.381  -8.623  1.00  0.00
ATOM    695  O   ALA   43     -14.707  -3.745  -9.159  1.00  0.00
ATOM    696  N   PRO   44     -16.925  -3.378  -9.280  1.00  0.00
ATOM    697  CA  PRO   44     -17.051  -3.815 -10.673  1.00  0.00
ATOM    698  HA  PRO   44     -16.545  -4.754 -10.841  1.00  0.00
ATOM    699  CB  PRO   44     -18.558  -4.006 -10.840  1.00  0.00
ATOM    700  HB1 PRO   44     -18.842  -3.787 -11.859  1.00  0.00
ATOM    701  HB2 PRO   44     -18.824  -5.024 -10.597  1.00  0.00
ATOM    702  CG  PRO   44     -19.165  -3.039  -9.884  1.00  0.00
ATOM    703  HG1 PRO   44     -19.259  -2.070 -10.352  1.00  0.00
ATOM    704  HG2 PRO   44     -20.133  -3.397  -9.564  1.00  0.00
ATOM    705  CD  PRO   44     -18.224  -2.963  -8.711  1.00  0.00
ATOM    706  HD1 PRO   44     -18.173  -1.953  -8.334  1.00  0.00
ATOM    707  HD2 PRO   44     -18.537  -3.642  -7.932  1.00  0.00
ATOM    708  C   PRO   44     -16.532  -2.775 -11.662  1.00  0.00
ATOM    709  O   PRO   44     -16.263  -3.090 -12.821  1.00  0.00
ATOM    710  N   GLY   45     -16.394  -1.536 -11.200  1.00  0.00
ATOM    711  HN  GLY   45     -16.627  -1.340 -10.268  1.00  0.00
ATOM    712  CA  GLY   45     -15.915  -0.473 -12.064  1.00  0.00
ATOM    713  HA1 GLY   45     -15.960  -0.810 -13.089  1.00  0.00
ATOM    714  HA2 GLY   45     -16.560   0.385 -11.950  1.00  0.00
ATOM    715  C   GLY   45     -14.491  -0.059 -11.747  1.00  0.00
ATOM    716  O   GLY   45     -14.134   1.111 -11.883  1.00  0.00
ATOM    717  N   TYR   46     -13.676  -1.020 -11.327  1.00  0.00
ATOM    718  HN  TYR   46     -14.018  -1.934 -11.241  1.00  0.00
ATOM    719  CA  TYR   46     -12.282  -0.748 -10.995  1.00  0.00
ATOM    720  HA  TYR   46     -12.243   0.205 -10.488  1.00  0.00
ATOM    721  CB  TYR   46     -11.739  -1.832 -10.062  1.00  0.00
ATOM    722  HB1 TYR   46     -10.765  -2.142 -10.411  1.00  0.00
ATOM    723  HB2 TYR   46     -12.408  -2.680 -10.078  1.00  0.00
ATOM    724  CG  TYR   46     -11.595  -1.382  -8.625  1.00  0.00
ATOM    725  CD1 TYR   46     -10.623  -1.931  -7.799  1.00  0.00
ATOM    726  HD1 TYR   46      -9.964  -2.690  -8.196  1.00  0.00
ATOM    727  CD2 TYR   46     -12.432  -0.408  -8.095  1.00  0.00
ATOM    728  HD2 TYR   46     -13.194   0.029  -8.724  1.00  0.00
ATOM    729  CE1 TYR   46     -10.487  -1.522  -6.486  1.00  0.00
ATOM    730  HE1 TYR   46      -9.725  -1.960  -5.859  1.00  0.00
ATOM    731  CE2 TYR   46     -12.303   0.007  -6.783  1.00  0.00
ATOM    732  HE2 TYR   46     -12.964   0.766  -6.389  1.00  0.00
ATOM    733  CZ  TYR   46     -11.330  -0.553  -5.983  1.00  0.00
ATOM    734  OH  TYR   46     -11.199  -0.143  -4.676  1.00  0.00
ATOM    735  HH  TYR   46     -10.892  -0.877  -4.139  1.00  0.00
ATOM    736  C   TYR   46     -11.427  -0.671 -12.256  1.00  0.00
ATOM    737  O   TYR   46     -11.940  -0.764 -13.371  1.00  0.00
ATOM    738  N   TYR   47     -10.120  -0.506 -12.072  1.00  0.00
ATOM    739  HN  TYR   47      -9.772  -0.440 -11.159  1.00  0.00
ATOM    740  CA  TYR   47      -9.189  -0.421 -13.195  1.00  0.00
ATOM    741  HA  TYR   47      -8.188  -0.506 -12.800  1.00  0.00
ATOM    742  CB  TYR   47      -9.433  -1.567 -14.181  1.00  0.00
ATOM    743  HB1 TYR   47     -10.224  -1.285 -14.860  1.00  0.00
ATOM    744  HB2 TYR   47      -8.529  -1.748 -14.743  1.00  0.00
ATOM    745  CG  TYR   47      -9.833  -2.862 -13.514  1.00  0.00
ATOM    746  CD1 TYR   47     -10.756  -3.715 -14.105  1.00  0.00
ATOM    747  HD1 TYR   47     -11.188  -3.443 -15.057  1.00  0.00
ATOM    748  CD2 TYR   47      -9.290  -3.229 -12.290  1.00  0.00
ATOM    749  HD2 TYR   47      -8.572  -2.574 -11.818  1.00  0.00
ATOM    750  CE1 TYR   47     -11.124  -4.899 -13.496  1.00  0.00
ATOM    751  HE1 TYR   47     -11.843  -5.550 -13.971  1.00  0.00
ATOM    752  CE2 TYR   47      -9.653  -4.411 -11.674  1.00  0.00
ATOM    753  HE2 TYR   47      -9.219  -4.679 -10.722  1.00  0.00
ATOM    754  CZ  TYR   47     -10.570  -5.242 -12.280  1.00  0.00
ATOM    755  OH  TYR   47     -10.934  -6.421 -11.671  1.00  0.00
ATOM    756  HH  TYR   47     -10.153  -6.958 -11.519  1.00  0.00
ATOM    757  C   TYR   47      -9.318   0.917 -13.916  1.00  0.00
ATOM    758  O   TYR   47      -8.360   1.686 -13.992  1.00  0.00
ATOM    759  N   GLU   48     -10.504   1.184 -14.451  1.00  0.00
ATOM    760  HN  GLU   48     -11.227   0.529 -14.362  1.00  0.00
ATOM    761  CA  GLU   48     -10.754   2.425 -15.175  1.00  0.00
ATOM    762  HA  GLU   48     -10.103   2.441 -16.037  1.00  0.00
ATOM    763  CB  GLU   48     -12.209   2.478 -15.648  1.00  0.00
ATOM    764  HB1 GLU   48     -12.854   2.529 -14.784  1.00  0.00
ATOM    765  HB2 GLU   48     -12.349   3.368 -16.244  1.00  0.00
ATOM    766  CG  GLU   48     -12.621   1.276 -16.482  1.00  0.00
ATOM    767  HG1 GLU   48     -12.135   1.337 -17.444  1.00  0.00
ATOM    768  HG2 GLU   48     -12.304   0.376 -15.976  1.00  0.00
ATOM    769  CD  GLU   48     -14.120   1.204 -16.702  1.00  0.00
ATOM    770  OE1 GLU   48     -14.858   1.919 -15.994  1.00  0.00
ATOM    771  OE2 GLU   48     -14.554   0.433 -17.584  1.00  0.00
ATOM    772  C   GLU   48     -10.445   3.639 -14.306  1.00  0.00
ATOM    773  O   GLU   48     -10.136   4.716 -14.815  1.00  0.00
ATOM    774  N   VAL   49     -10.529   3.459 -12.992  1.00  0.00
ATOM    775  HN  VAL   49     -10.781   2.578 -12.644  1.00  0.00
ATOM    776  CA  VAL   49     -10.261   4.545 -12.055  1.00  0.00
ATOM    777  HA  VAL   49      -9.905   5.392 -12.624  1.00  0.00
ATOM    778  CB  VAL   49     -11.542   4.971 -11.313  1.00  0.00
ATOM    779  HB  VAL   49     -12.308   5.171 -12.047  1.00  0.00
ATOM    780  CG1 VAL   49     -12.033   3.853 -10.407  1.00  0.00
ATOM    781 HG11 VAL   49     -11.630   3.991  -9.414  1.00  0.00
ATOM    782 HG12 VAL   49     -11.705   2.901 -10.799  1.00  0.00
ATOM    783 HG13 VAL   49     -13.112   3.872 -10.364  1.00  0.00
ATOM    784  CG2 VAL   49     -11.301   6.246 -10.518  1.00  0.00
ATOM    785 HG21 VAL   49     -10.706   6.020  -9.646  1.00  0.00
ATOM    786 HG22 VAL   49     -12.249   6.661 -10.209  1.00  0.00
ATOM    787 HG23 VAL   49     -10.779   6.963 -11.135  1.00  0.00
ATOM    788  C   VAL   49      -9.195   4.160 -11.026  1.00  0.00
ATOM    789  O   VAL   49      -8.861   4.956 -10.148  1.00  0.00
ATOM    790  N   ILE   50      -8.665   2.941 -11.130  1.00  0.00
ATOM    791  HN  ILE   50      -8.958   2.347 -11.847  1.00  0.00
ATOM    792  CA  ILE   50      -7.644   2.474 -10.204  1.00  0.00
ATOM    793  HA  ILE   50      -7.342   3.309  -9.589  1.00  0.00
ATOM    794  CB  ILE   50      -8.182   1.365  -9.282  1.00  0.00
ATOM    795  HB  ILE   50      -8.267   0.458  -9.861  1.00  0.00
ATOM    796  CG1 ILE   50      -9.559   1.747  -8.737  1.00  0.00
ATOM    797 HG11 ILE   50     -10.222   1.952  -9.564  1.00  0.00
ATOM    798 HG12 ILE   50      -9.952   0.921  -8.162  1.00  0.00
ATOM    799  CG2 ILE   50      -7.210   1.105  -8.142  1.00  0.00
ATOM    800 HG21 ILE   50      -6.248   1.528  -8.387  1.00  0.00
ATOM    801 HG22 ILE   50      -7.108   0.041  -7.991  1.00  0.00
ATOM    802 HG23 ILE   50      -7.586   1.561  -7.238  1.00  0.00
ATOM    803  CD1 ILE   50      -9.540   2.967  -7.843  1.00  0.00
ATOM    804 HD11 ILE   50      -9.670   3.855  -8.443  1.00  0.00
ATOM    805 HD12 ILE   50      -8.593   3.019  -7.325  1.00  0.00
ATOM    806 HD13 ILE   50     -10.341   2.898  -7.123  1.00  0.00
ATOM    807  C   ILE   50      -6.428   1.945 -10.953  1.00  0.00
ATOM    808  O   ILE   50      -6.557   1.228 -11.945  1.00  0.00
ATOM    809  N   ARG   51      -5.248   2.301 -10.466  1.00  0.00
ATOM    810  HN  ARG   51      -5.216   2.877  -9.676  1.00  0.00
ATOM    811  CA  ARG   51      -4.000   1.873 -11.085  1.00  0.00
ATOM    812  HA  ARG   51      -4.014   2.198 -12.114  1.00  0.00
ATOM    813  CB  ARG   51      -2.811   2.519 -10.373  1.00  0.00
ATOM    814  HB1 ARG   51      -3.181   3.123  -9.557  1.00  0.00
ATOM    815  HB2 ARG   51      -2.177   1.740  -9.975  1.00  0.00
ATOM    816  CG  ARG   51      -1.967   3.403 -11.277  1.00  0.00
ATOM    817  HG1 ARG   51      -2.041   3.037 -12.291  1.00  0.00
ATOM    818  HG2 ARG   51      -0.939   3.358 -10.950  1.00  0.00
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REPLACEMENT SHEET

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ATOM    819  CD  ARG    51      -2.433   4.849 -11.240  1.00  0.00
ATOM    820  HD1 ARG    51      -2.996   5.010 -10.332  1.00  0.00
ATOM    821  HD2 ARG    51      -1.566   5.493 -11.244  1.00  0.00
ATOM    822  NE  ARG    51      -3.275   5.184 -12.385  1.00  0.00
ATOM    823  HE  ARG    51      -4.217   5.390 -12.212  1.00  0.00
ATOM    824  CZ  ARG    51      -2.832   5.226 -13.638  1.00  0.00
ATOM    825  NH1 ARG    51      -1.562   4.953 -13.904  1.00  0.00
ATOM    826 HH11 ARG    51      -1.231   4.984 -14.846  1.00  0.00
ATOM    827 HH12 ARG    51      -0.936   4.716 -13.161  1.00  0.00
ATOM    828  NH2 ARG    51      -3.659   5.539 -14.626  1.00  0.00
ATOM    829 HH21 ARG    51      -3.323   5.569 -15.568  1.00  0.00
ATOM    830 HH22 ARG    51      -4.617   5.746 -14.430  1.00  0.00
ATOM    831  C   ARG    51      -3.864   0.354 -11.056  1.00  0.00
ATOM    832  O   ARG    51      -4.094  -0.319 -12.061  1.00  0.00
ATOM    833  N   SER    52      -3.479  -0.182  -9.901  1.00  0.00
ATOM    834  HN  SER    52      -3.310   0.403  -9.134  1.00  0.00
ATOM    835  CA  SER    52      -3.307  -1.622  -9.751  1.00  0.00
ATOM    836  HA  SER    52      -3.766  -2.101 -10.603  1.00  0.00
ATOM    837  CB  SER    52      -1.820  -1.980  -9.715  1.00  0.00
ATOM    838  HB1 SER    52      -1.690  -3.005 -10.027  1.00  0.00
ATOM    839  HB2 SER    52      -1.447  -1.860  -8.708  1.00  0.00
ATOM    840  OG  SER    52      -1.072  -1.143 -10.580  1.00  0.00
ATOM    841  HG  SER    52      -0.287  -1.608 -10.877  1.00  0.00
ATOM    842  C   SER    52      -3.993  -2.128  -8.488  1.00  0.00
ATOM    843  O   SER    52      -3.353  -2.308  -7.452  1.00  0.00
ATOM    844  N   PRO    53      -5.310  -2.379  -8.565  1.00  0.00
ATOM    845  CA  PRO    53      -6.087  -2.882  -7.435  1.00  0.00
ATOM    846  HA  PRO    53      -6.390  -2.083  -6.773  1.00  0.00
ATOM    847  CB  PRO    53      -7.313  -3.484  -8.111  1.00  0.00
ATOM    848  HB1 PRO    53      -8.160  -3.415  -7.450  1.00  0.00
ATOM    849  HB2 PRO    53      -7.122  -4.519  -8.355  1.00  0.00
ATOM    850  CG  PRO    53      -7.512  -2.661  -9.337  1.00  0.00
ATOM    851  HG1 PRO    53      -7.963  -3.263 -10.110  1.00  0.00
ATOM    852  HG2 PRO    53      -8.139  -1.812  -9.109  1.00  0.00
ATOM    853  CD  PRO    53      -6.145  -2.197  -9.770  1.00  0.00
ATOM    854  HD1 PRO    53      -5.780  -2.805 -10.584  1.00  0.00
ATOM    855  HD2 PRO    53      -6.176  -1.157 -10.060  1.00  0.00
ATOM    856  C   PRO    53      -5.340  -3.947  -6.639  1.00  0.00
ATOM    857  O   PRO    53      -5.425  -5.137  -6.943  1.00  0.00
ATOM    858  N   MET    54      -4.609  -3.512  -5.619  1.00  0.00
ATOM    859  HN  MET    54      -4.581  -2.552  -5.426  1.00  0.00
ATOM    860  CA  MET    54      -3.850  -4.428  -4.777  1.00  0.00
ATOM    861  HA  MET    54      -4.303  -5.405  -4.859  1.00  0.00
ATOM    862  CB  MET    54      -2.398  -4.508  -5.253  1.00  0.00
ATOM    863  HB1 MET    54      -2.390  -4.624  -6.327  1.00  0.00
ATOM    864  HB2 MET    54      -1.897  -3.587  -4.995  1.00  0.00
ATOM    865  CG  MET    54      -1.615  -5.660  -4.644  1.00  0.00
ATOM    866  HG1 MET    54      -1.472  -5.464  -3.592  1.00  0.00
ATOM    867  HG2 MET    54      -0.653  -5.720  -5.132  1.00  0.00
ATOM    868  SD  MET    54      -2.452  -7.247  -4.826  1.00  0.00
ATOM    869  CE  MET    54      -3.383  -7.311  -3.298  1.00  0.00
ATOM    870  HE1 MET    54      -2.905  -7.997  -2.612  1.00  0.00
ATOM    871  HE2 MET    54      -4.388  -7.650  -3.501  1.00  0.00
ATOM    872  HE3 MET    54      -3.418  -6.327  -2.857  1.00  0.00
ATOM    873  C   MET    54      -3.897  -3.984  -3.320  1.00  0.00
ATOM    874  O   MET    54      -2.937  -3.415  -2.802  1.00  0.00
ATOM    875  N   ASP    55      -5.026  -4.240  -2.667  1.00  0.00
ATOM    876  HN  ASP    55      -5.755  -4.699  -3.134  1.00  0.00
ATOM    877  CA  ASP    55      -5.201  -3.870  -1.269  1.00  0.00
ATOM    878  HA  ASP    55      -4.803  -2.874  -1.139  1.00  0.00
ATOM    879  CB  ASP    55      -6.690  -3.863  -0.906  1.00  0.00
ATOM    880  HB1 ASP    55      -6.811  -3.495   0.102  1.00  0.00
ATOM    881  HB2 ASP    55      -7.075  -4.869  -0.964  1.00  0.00
ATOM    882  CG  ASP    55      -7.506  -2.985  -1.835  1.00  0.00
ATOM    883  OD1 ASP    55      -7.575  -3.302  -3.041  1.00  0.00
ATOM    884  OD2 ASP    55      -8.074  -1.981  -1.357  1.00  0.00
ATOM    885  C   ASP    55      -4.435  -4.826  -0.360  1.00  0.00
ATOM    886  O   ASP    55      -3.578  -5.580  -0.819  1.00  0.00
ATOM    887  N   LEU    56      -4.739  -4.786   0.931  1.00  0.00
ATOM    888  HN  LEU    56      -5.426  -4.163   1.242  1.00  0.00
ATOM    889  CA  LEU    56      -4.069  -5.644   1.898  1.00  0.00
ATOM    890  HA  LEU    56      -3.012  -5.620   1.683  1.00  0.00
ATOM    891  CB  LEU    56      -4.305  -5.115   3.318  1.00  0.00
ATOM    892  HB1 LEU    56      -4.223  -5.939   4.008  1.00  0.00
ATOM    893  HB2 LEU    56      -5.306  -4.729   3.371  1.00  0.00
ATOM    894  CG  LEU    56      -3.343  -4.015   3.770  1.00  0.00
ATOM    895  HG  LEU    56      -3.605  -3.702   4.770  1.00  0.00
ATOM    896  CD1 LEU    56      -3.425  -2.802   2.859  1.00  0.00
ATOM    897 HD11 LEU    56      -3.644  -1.924   3.449  1.00  0.00
ATOM    898 HD12 LEU    56      -4.204  -2.950   2.132  1.00  0.00
ATOM    899 HD13 LEU    56      -2.481  -2.668   2.352  1.00  0.00
ATOM    900  CD2 LEU    56      -1.929  -4.544   3.801  1.00  0.00
ATOM    901 HD21 LEU    56      -1.279  -3.850   3.291  1.00  0.00
ATOM    902 HD22 LEU    56      -1.898  -5.500   3.303  1.00  0.00
ATOM    903 HD23 LEU    56      -1.611  -4.656   4.824  1.00  0.00
ATOM    904  C   LEU    56      -4.568  -7.081   1.773  1.00  0.00
ATOM    905  O   LEU    56      -5.294  -7.404   0.835  1.00  0.00
ATOM    906  N   LYS    57      -4.152  -7.939   2.706  1.00  0.00
ATOM    907  HN  LYS    57      -3.564  -7.617   3.417  1.00  0.00
ATOM    908  CA  LYS    57      -4.555  -9.347   2.715  1.00  0.00
ATOM    909  HA  LYS    57      -4.259  -9.758   3.669  1.00  0.00
ATOM    910  CB  LYS    57      -6.075  -9.490   2.576  1.00  0.00
ATOM    911  HB1 LYS    57      -6.549  -9.007   3.418  1.00  0.00
ATOM    912  HB2 LYS    57      -6.396  -9.008   1.668  1.00  0.00
ATOM    913  CG  LYS    57      -6.542 -10.935   2.530  1.00  0.00
ATOM    914  HG1 LYS    57      -6.160 -11.395   1.629  1.00  0.00
ATOM    915  HG2 LYS    57      -7.622 -10.954   2.517  1.00  0.00
ATOM    916  CD  LYS    57      -6.049 -11.720   3.735  1.00  0.00
ATOM    917  HD1 LYS    57      -5.944 -11.047   4.573  1.00  0.00
ATOM    918  HD2 LYS    57      -5.090 -12.157   3.498  1.00  0.00
ATOM    919  CE  LYS    57      -7.017 -12.831   4.112  1.00  0.00
ATOM    920  HE1 LYS    57      -7.967 -12.640   3.635  1.00  0.00
ATOM    921  HE2 LYS    57      -6.621 -13.771   3.759  1.00  0.00
ATOM    922  NZ  LYS    57      -7.223 -12.915   5.585  1.00  0.00
ATOM    923  HZ1 LYS    57      -6.363 -12.609   6.084  1.00  0.00
ATOM    924  HZ2 LYS    57      -7.441 -13.894   5.860  1.00  0.00
ATOM    925  HZ3 LYS    57      -8.013 -12.302   5.871  1.00  0.00
ATOM    926  C   LYS    57      -3.855 -10.144   1.617  1.00  0.00
ATOM    927  O   LYS    57      -3.197 -11.146   1.895  1.00  0.00
ATOM    928  N   THR    58      -4.014  -9.714   0.370  1.00  0.00
ATOM    929  HN  THR    58      -4.551  -8.913   0.201  1.00  0.00
ATOM    930  CA  THR    58      -3.403 -10.411  -0.755  1.00  0.00
ATOM    931  HA  THR    58      -3.409 -11.465  -0.527  1.00  0.00
ATOM    932  CB  THR    58      -4.223 -10.177  -2.031  1.00  0.00
ATOM    933  HB  THR    58      -4.448  -9.126  -2.112  1.00  0.00
ATOM    934  OG1 THR    58      -5.448 -10.887  -1.970  1.00  0.00
ATOM    935  HG1 THR    58      -5.974 -10.557  -1.238  1.00  0.00
ATOM    936  CG2 THR    58      -3.515 -10.598  -3.304  1.00  0.00
ATOM    937 HG21 THR    58      -4.236 -11.003  -3.999  1.00  0.00
ATOM    938 HG22 THR    58      -2.775 -11.349  -3.073  1.00  0.00
ATOM    939 HG23 THR    58      -3.031  -9.740  -3.747  1.00  0.00
ATOM    940  C   THR    58      -1.956  -9.961  -0.952  1.00  0.00
ATOM    941  O   THR    58      -1.093 -10.759  -1.318  1.00  0.00
ATOM    942  N   MET    59      -1.697  -8.682  -0.701  1.00  0.00
ATOM    943  HN  MET    59      -2.426  -8.092  -0.413  1.00  0.00
ATOM    944  CA  MET    59      -0.355  -8.132  -0.851  1.00  0.00
ATOM    945  HA  MET    59       0.020  -8.431  -1.819  1.00  0.00
ATOM    946  CB  MET    59      -0.404  -6.605  -0.783  1.00  0.00
ATOM    947  HB1 MET    59       0.536  -6.209  -1.138  1.00  0.00
ATOM    948  HB2 MET    59      -1.200  -6.252  -1.423  1.00  0.00
ATOM    949  CG  MET    59      -0.650  -6.072   0.617  1.00  0.00
ATOM    950  HG1 MET    59      -1.503  -6.585   1.032  1.00  0.00
ATOM    951  HG2 MET    59       0.218  -6.279   1.223  1.00  0.00
ATOM    952  SD  MET    59      -0.969  -4.297   0.643  1.00  0.00
ATOM    953  CE  MET    59       0.230  -3.715  -0.554  1.00  0.00
ATOM    954  HE1 MET    59       0.178  -4.324  -1.443  1.00  0.00
ATOM    955  HE2 MET    59       1.221  -3.779  -0.131  1.00  0.00
ATOM    956  HE3 MET    59       0.016  -2.688  -0.808  1.00  0.00
ATOM    957  C   MET    59       0.582  -8.669   0.228  1.00  0.00
ATOM    958  O   MET    59       1.701  -9.092  -0.061  1.00  0.00
ATOM    959  N   SER    60       0.126  -8.621   1.476  1.00  0.00
ATOM    960  HN  SER    60      -0.772  -8.270   1.644  1.00  0.00
ATOM    961  CA  SER    60       0.925  -9.088   2.601  1.00  0.00
ATOM    962  HA  SER    60       1.789  -8.445   2.682  1.00  0.00
ATOM    963  CB  SER    60       0.117  -9.004   3.898  1.00  0.00
ATOM    964  HB1 SER    60       0.214  -8.013   4.315  1.00  0.00
ATOM    965  HB2 SER    60      -0.922  -9.205   3.686  1.00  0.00
ATOM    966  OG  SER    60       0.579  -9.946   4.852  1.00  0.00
ATOM    967  HG  SER    60       1.273  -9.548   5.383  1.00  0.00
ATOM    968  C   SER    60       1.401 -10.517   2.372  1.00  0.00
ATOM    969  O   SER    60       2.417 -10.939   2.923  1.00  0.00
ATOM    970  N   GLU    61       0.665 -11.258   1.551  1.00  0.00
ATOM    971  HN  GLU    61      -0.134 -10.867   1.137  1.00  0.00
ATOM    972  CA  GLU    61       1.022 -12.636   1.249  1.00  0.00
ATOM    973  HA  GLU    61       1.138 -13.156   2.186  1.00  0.00
ATOM    974  CB  GLU    61      -0.084 -13.309   0.435  1.00  0.00
ATOM    975  HB1 GLU    61       0.025 -14.380   0.516  1.00  0.00
ATOM    976  HB2 GLU    61       0.021 -13.022  -0.601  1.00  0.00
ATOM    977  CG  GLU    61      -1.484 -12.937   0.891  1.00  0.00
ATOM    978  HG1 GLU    61      -1.460 -12.730   1.951  1.00  0.00
ATOM    979  HG2 GLU    61      -1.797 -12.051   0.360  1.00  0.00
ATOM    980  CD  GLU    61      -2.493 -14.039   0.636  1.00  0.00
ATOM    981  OE1 GLU    61      -2.755 -14.830   1.567  1.00  0.00
ATOM    982  OE2 GLU    61      -3.020 -14.112  -0.494  1.00  0.00
ATOM    983  C   GLU    61       2.338 -12.695   0.485  1.00  0.00
ATOM    984  O   GLU    61       3.295 -13.334   0.922  1.00  0.00
ATOM    985  N   ARG    62       2.382 -12.013  -0.654  1.00  0.00
ATOM    986  HN  ARG    62       1.588 -11.524  -0.949  1.00  0.00
ATOM    987  CA  ARG    62       3.578 -11.980  -1.479  1.00  0.00
ATOM    988  HA  ARG    62       3.752 -12.979  -1.846  1.00  0.00
ATOM    989  CB  ARG    62       3.368 -11.045  -2.672  1.00  0.00
ATOM    990  HB1 ARG    62       4.330 -10.804  -3.101  1.00  0.00
ATOM    991  HB2 ARG    62       2.898 -10.136  -2.326  1.00  0.00
ATOM    992  CG  ARG    62       2.496 -11.652  -3.761  1.00  0.00
ATOM    993  HG1 ARG    62       1.895 -12.438  -3.328  1.00  0.00
ATOM    994  HG2 ARG    62       3.131 -12.065  -4.528  1.00  0.00
ATOM    995  CD  ARG    62       1.576 -10.619  -4.389  1.00  0.00
ATOM    996  HD1 ARG    62       2.043  -9.647  -4.320  1.00  0.00
ATOM    997  HD2 ARG    62       0.645 -10.609  -3.845  1.00  0.00
ATOM    998  NE  ARG    62       1.299 -10.916  -5.792  1.00  0.00
ATOM    999  HE  ARG    62       1.697 -10.330  -6.467  1.00  0.00
ATOM   1000  CZ  ARG    62       0.541 -11.931  -6.194  1.00  0.00
ATOM   1001  NH1 ARG    62       0.336 -12.136  -7.488  1.00  0.00
ATOM   1002 HH11 ARG    62       0.753 -11.527  -8.163  1.00  0.00
ATOM   1003 HH12 ARG    62      -0.235 -12.900  -7.789  1.00  0.00
ATOM   1004  NH2 ARG    62      -0.014 -12.742  -5.303  1.00  0.00
ATOM   1005 HH21 ARG    62       0.139 -12.590  -4.326  1.00  0.00
ATOM   1006 HH22 ARG    62      -0.583 -13.505  -5.608  1.00  0.00
ATOM   1007  C   ARG    62       4.790 -11.542  -0.664  1.00  0.00
ATOM   1008  O   ARG    62       5.781 -12.266  -0.576  1.00  0.00
ATOM   1009  N   LEU    63       4.700 -10.366  -0.052  1.00  0.00
ATOM   1010  HN  LEU    63       3.882  -9.835  -0.149  1.00  0.00
ATOM   1011  CA  LEU    63       5.792  -9.853   0.768  1.00  0.00
ATOM   1012  HA  LEU    63       6.634  -9.663   0.117  1.00  0.00
ATOM   1013  CB  LEU    63       5.384  -8.546   1.450  1.00  0.00
ATOM   1014  HB1 LEU    63       5.208  -7.805   0.685  1.00  0.00
ATOM   1015  HB2 LEU    63       4.460  -8.716   1.982  1.00  0.00
ATOM   1016  CG  LEU    63       6.413  -7.984   2.436  1.00  0.00
ATOM   1017  HG  LEU    63       7.141  -8.747   2.663  1.00  0.00
ATOM   1018  CD1 LEU    63       7.148  -6.804   1.825  1.00  0.00
ATOM   1019 HD11 LEU    63       6.457  -5.991   1.672  1.00  0.00
ATOM   1020 HD12 LEU    63       7.575  -7.097   0.877  1.00  0.00
ATOM   1021 HD13 LEU    63       7.937  -6.487   2.492  1.00  0.00
ATOM   1022  CD2 LEU    63       5.741  -7.580   3.738  1.00  0.00
ATOM   1023 HD21 LEU    63       4.709  -7.899   3.726  1.00  0.00
ATOM   1024 HD22 LEU    63       5.785  -6.507   3.848  1.00  0.00
ATOM   1025 HD23 LEU    63       6.252  -8.049   4.565  1.00  0.00
ATOM   1026  C   LEU    63       6.204 -10.880   1.817  1.00  0.00
ATOM   1027  O   LEU    63       7.391 -11.134   2.019  1.00  0.00
ATOM   1028  N   LYS    64       5.212 -11.475   2.475  1.00  0.00
ATOM   1029  HN  LYS    64       4.287 -11.235   2.262  1.00  0.00
ATOM   1030  CA  LYS    64       5.469 -12.487   3.492  1.00  0.00
ATOM   1031  HA  LYS    64       5.942 -12.002   4.333  1.00  0.00
ATOM   1032  CB  LYS    64       4.155 -13.122   3.953  1.00  0.00
ATOM   1033  HB1 LYS    64       3.506 -13.240   3.098  1.00  0.00
ATOM   1034  HB2 LYS    64       4.365 -14.094   4.372  1.00  0.00
ATOM   1035  CG  LYS    64       3.416 -12.301   5.000  1.00  0.00
ATOM   1036  HG1 LYS    64       3.615 -11.254   4.828  1.00  0.00
ATOM   1037  HG2 LYS    64       2.356 -12.488   4.907  1.00  0.00
ATOM   1038  CD  LYS    64       3.859 -12.663   6.408  1.00  0.00
ATOM   1039  HD1 LYS    64       3.007 -13.038   6.957  1.00  0.00
ATOM   1040  HD2 LYS    64       4.618 -13.428   6.351  1.00  0.00
ATOM   1041  CE  LYS    64       4.426 -11.459   7.141  1.00  0.00
ATOM   1042  HE1 LYS    64       4.711 -10.712   6.414  1.00  0.00
ATOM   1043  HE2 LYS    64       3.663 -11.056   7.790  1.00  0.00
ATOM   1044  NZ  LYS    64       5.618 -11.817   7.959  1.00  0.00
ATOM   1045  HZ1 LYS    64       6.086 -12.655   7.560  1.00  0.00
ATOM   1046  HZ2 LYS    64       5.332 -12.025   8.936  1.00  0.00
ATOM   1047  HZ3 LYS    64       6.295 -11.028   7.968  1.00  0.00
ATOM   1048  C   LYS    64       6.407 -13.562   2.953  1.00  0.00
ATOM   1049  O   LYS    64       7.255 -14.082   3.677  1.00  0.00
ATOM   1050  N   ASN    65       6.256 -13.879   1.671  1.00  0.00
ATOM   1051  HN  ASN    65       5.569 -13.420   1.143  1.00  0.00
ATOM   1052  CA  ASN    65       7.103 -14.872   1.023  1.00  0.00
ATOM   1053  HA  ASN    65       7.632 -15.410   1.795  1.00  0.00
ATOM   1054  CB  ASN    65       6.254 -15.855   0.214  1.00  0.00
ATOM   1055  HB1 ASN    65       6.762 -16.082  -0.712  1.00  0.00
ATOM   1056  HB2 ASN    65       5.299 -15.400  -0.006  1.00  0.00
ATOM   1057  CG  ASN    65       6.006 -17.155   0.954  1.00  0.00
ATOM   1058  OD1 ASN    65       6.266 -18.239   0.433  1.00  0.00
ATOM   1059  ND2 ASN    65       5.501 -17.052   2.178  1.00  0.00
ATOM   1060 HD21 ASN    65       5.318 -16.156   2.530  1.00  0.00
ATOM   1061 HD22 ASN    65       5.331 -17.877   2.679  1.00  0.00
ATOM   1062  C   ASN    65       8.122 -14.195   0.119  1.00  0.00
ATOM   1063  O   ASN    65       8.532 -14.749  -0.901  1.00  0.00
ATOM   1064  N   ARG    66       8.535 -12.995   0.510  1.00  0.00
ATOM   1065  HN  ARG    66       8.174 -12.614   1.338  1.00  0.00
ATOM   1066  CA  ARG    66       9.524 -12.235  -0.247  1.00  0.00
ATOM   1067  HA  ARG    66       9.535 -11.232   0.148  1.00  0.00
ATOM   1068  CB  ARG    66      10.919 -12.848  -0.092  1.00  0.00
ATOM   1069  HB1 ARG    66      11.122 -13.471  -0.950  1.00  0.00
ATOM   1070  HB2 ARG    66      11.643 -12.051  -0.063  1.00  0.00
ATOM   1071  CG  ARG    66      11.100 -13.692   1.161  1.00  0.00
ATOM   1072  HG1 ARG    66      11.963 -14.321   1.031  1.00  0.00
ATOM   1073  HG2 ARG    66      10.225 -14.307   1.303  1.00  0.00
ATOM   1074  CD  ARG    66      11.298 -12.825   2.392  1.00  0.00
ATOM   1075  HD1 ARG    66      11.969 -12.017   2.143  1.00  0.00
ATOM   1076  HD2 ARG    66      10.342 -12.420   2.689  1.00  0.00
ATOM   1077  NE  ARG    66      11.860 -13.580   3.509  1.00  0.00
ATOM   1078  HE  ARG    66      12.826 -13.512   3.663  1.00  0.00
ATOM   1079  CZ  ARG    66      11.136 -14.344   4.319  1.00  0.00
ATOM   1080  NH1 ARG    66      11.719 -14.998   5.314  1.00  0.00
ATOM   1081 HH11 ARG    66      12.706 -14.917   5.455  1.00  0.00
ATOM   1082 HH12 ARG    66      11.173 -15.573   5.923  1.00  0.00
ATOM   1083  NH2 ARG    66       9.827 -14.454   4.136  1.00  0.00
ATOM   1084 HH21 ARG    66       9.384 -13.963   3.387  1.00  0.00
ATOM   1085 HH22 ARG    66       9.284 -15.030   4.747  1.00  0.00
ATOM   1086  C   ARG    66       9.153 -12.177  -1.725  1.00  0.00
ATOM   1087  O   ARG    66      10.018 -12.041  -2.590  1.00  0.00
ATOM   1088  N   TYR    67       7.862 -12.285  -2.002  1.00  0.00
ATOM   1089  HN  TYR    67       7.230 -12.408  -1.266  1.00  0.00
ATOM   1090  CA  TYR    67       7.364 -12.275  -3.374  1.00  0.00
ATOM   1091  HA  TYR    67       8.125 -12.708  -4.006  1.00  0.00
ATOM   1092  CB  TYR    67       6.091 -13.117  -3.475  1.00  0.00
ATOM   1093  HB1 TYR    67       6.193 -13.995  -2.856  1.00  0.00
ATOM   1094  HB2 TYR    67       5.259 -12.530  -3.121  1.00  0.00
ATOM   1095  CG  TYR    67       5.767 -13.566  -4.881  1.00  0.00
ATOM   1096  CD1 TYR    67       6.113 -14.835  -5.326  1.00  0.00
ATOM   1097  HD1 TYR    67       6.628 -15.506  -4.654  1.00  0.00
ATOM   1098  CD2 TYR    67       5.107 -12.720  -5.761  1.00  0.00
ATOM   1099  HD2 TYR    67       4.827 -11.731  -5.427  1.00  0.00
ATOM   1100  CE1 TYR    67       5.811 -15.247  -6.611  1.00  0.00
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REPLACEMENT SHEET

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ATOM   1101  HE1 TYR    67       6.089 -16.237  -6.940  1.00  0.00
ATOM   1102  CE2 TYR    67       4.798 -13.123  -7.044  1.00  0.00
ATOM   1103  HE2 TYR    67       4.281 -12.449  -7.711  1.00  0.00
ATOM   1104  CZ  TYR    67       5.153 -14.387  -7.466  1.00  0.00
ATOM   1105  OH  TYR    67       4.850 -14.793  -8.745  1.00  0.00
ATOM   1106  HH  TYR    67       4.026 -15.286  -8.737  1.00  0.00
ATOM   1107  C   TYR    67       7.066 -10.860  -3.859  1.00  0.00
ATOM   1108  O   TYR    67       6.990 -10.616  -5.063  1.00  0.00
ATOM   1109  N   TYR    68       6.859  -9.937  -2.925  1.00  0.00
ATOM   1110  HN  TYR    68       6.909 -10.187  -1.978  1.00  0.00
ATOM   1111  CA  TYR    68       6.515  -8.568  -3.280  1.00  0.00
ATOM   1112  HA  TYR    68       6.570  -8.478  -4.355  1.00  0.00
ATOM   1113  CB  TYR    68       5.089  -8.263  -2.821  1.00  0.00
ATOM   1114  HB1 TYR    68       4.746  -9.065  -2.186  1.00  0.00
ATOM   1115  HB2 TYR    68       5.096  -7.348  -2.256  1.00  0.00
ATOM   1116  CG  TYR    68       4.089  -8.103  -3.946  1.00  0.00
ATOM   1117  CD1 TYR    68       4.278  -8.729  -5.174  1.00  0.00
ATOM   1118  HD1 TYR    68       5.157  -9.336  -5.327  1.00  0.00
ATOM   1119  CD2 TYR    68       2.946  -7.334  -3.772  1.00  0.00
ATOM   1120  HD2 TYR    68       2.783  -6.844  -2.823  1.00  0.00
ATOM   1121  CE1 TYR    68       3.359  -8.582  -6.196  1.00  0.00
ATOM   1122  HE1 TYR    68       3.523  -9.075  -7.143  1.00  0.00
ATOM   1123  CE2 TYR    68       2.022  -7.185  -4.789  1.00  0.00
ATOM   1124  HE2 TYR    68       1.141  -6.581  -4.633  1.00  0.00
ATOM   1125  CZ  TYR    68       2.233  -7.811  -5.998  1.00  0.00
ATOM   1126  OH  TYR    68       1.315  -7.665  -7.012  1.00  0.00
ATOM   1127  HH  TYR    68       0.444  -7.518  -6.637  1.00  0.00
ATOM   1128  C   TYR    68       7.484  -7.570  -2.656  1.00  0.00
ATOM   1129  O   TYR    68       7.096  -6.457  -2.303  1.00  0.00
ATOM   1130  N   VAL    69       8.744  -7.967  -2.529  1.00  0.00
ATOM   1131  HN  VAL    69       9.000  -8.862  -2.835  1.00  0.00
ATOM   1132  CA  VAL    69       9.761  -7.086  -1.962  1.00  0.00
ATOM   1133  HA  VAL    69       9.284  -6.461  -1.221  1.00  0.00
ATOM   1134  CB  VAL    69      10.907  -7.854  -1.276  1.00  0.00
ATOM   1135  HB  VAL    69      11.715  -7.964  -1.984  1.00  0.00
ATOM   1136  CG1 VAL    69      10.465  -9.242  -0.846  1.00  0.00
ATOM   1137 HG11 VAL    69       9.487  -9.183  -0.393  1.00  0.00
ATOM   1138 HG12 VAL    69      11.171  -9.640  -0.133  1.00  0.00
ATOM   1139 HG13 VAL    69      10.423  -9.887  -1.712  1.00  0.00
ATOM   1140  CG2 VAL    69      11.422  -7.059  -0.090  1.00  0.00
ATOM   1141 HG21 VAL    69      12.197  -7.619   0.411  1.00  0.00
ATOM   1142 HG22 VAL    69      10.608  -6.872   0.597  1.00  0.00
ATOM   1143 HG23 VAL    69      11.822  -6.118  -0.438  1.00  0.00
ATOM   1144  C   VAL    69      10.352  -6.199  -3.043  1.00  0.00
ATOM   1145  O   VAL    69      11.543  -6.272  -3.345  1.00  0.00
ATOM   1146  N   SER    70       9.507  -5.372  -3.634  1.00  0.00
ATOM   1147  HN  SER    70       8.566  -5.371  -3.359  1.00  0.00
ATOM   1148  CA  SER    70       9.934  -4.491  -4.703  1.00  0.00
ATOM   1149  HA  SER    70      10.985  -4.285  -4.564  1.00  0.00
ATOM   1150  CB  SER    70       9.734  -5.190  -6.045  1.00  0.00
ATOM   1151  HB1 SER    70      10.626  -5.749  -6.289  1.00  0.00
ATOM   1152  HB2 SER    70       8.898  -5.868  -5.966  1.00  0.00
ATOM   1153  OG  SER    70       9.476  -4.258  -7.081  1.00  0.00
ATOM   1154  HG  SER    70      10.175  -3.600  -7.102  1.00  0.00
ATOM   1155  C   SER    70       9.164  -3.179  -4.657  1.00  0.00
ATOM   1156  O   SER    70       7.969  -3.158  -4.359  1.00  0.00
ATOM   1157  N   LYS    71       9.861  -2.083  -4.924  1.00  0.00
ATOM   1158  HN  LYS    71      10.816  -2.163  -5.131  1.00  0.00
ATOM   1159  CA  LYS    71       9.258  -0.761  -4.863  1.00  0.00
ATOM   1160  HA  LYS    71       8.988  -0.582  -3.832  1.00  0.00
ATOM   1161  CB  LYS    71      10.271   0.305  -5.297  1.00  0.00
ATOM   1162  HB1 LYS    71      11.076   0.332  -4.577  1.00  0.00
ATOM   1163  HB2 LYS    71      10.673   0.029  -6.261  1.00  0.00
ATOM   1164  CG  LYS    71       9.687   1.706  -5.409  1.00  0.00
ATOM   1165  HG1 LYS    71       9.954   2.267  -4.528  1.00  0.00
ATOM   1166  HG2 LYS    71       8.613   1.638  -5.482  1.00  0.00
ATOM   1167  CD  LYS    71      10.218   2.433  -6.634  1.00  0.00
ATOM   1168  HD1 LYS    71      11.033   1.863  -7.054  1.00  0.00
ATOM   1169  HD2 LYS    71       9.424   2.521  -7.360  1.00  0.00
ATOM   1170  CE  LYS    71      10.721   3.824  -6.282  1.00  0.00
ATOM   1171  HE1 LYS    71      11.466   3.737  -5.506  1.00  0.00
ATOM   1172  HE2 LYS    71       9.891   4.412  -5.919  1.00  0.00
ATOM   1173  NZ  LYS    71      11.323   4.511  -7.457  1.00  0.00
ATOM   1174  HZ1 LYS    71      10.580   4.970  -8.023  1.00  0.00
ATOM   1175  HZ2 LYS    71      11.823   3.823  -8.056  1.00  0.00
ATOM   1176  HZ3 LYS    71      12.000   5.234  -7.141  1.00  0.00
ATOM   1177  C   LYS    71       7.984  -0.678  -5.707  1.00  0.00
ATOM   1178  O   LYS    71       6.898  -1.000  -5.224  1.00  0.00
ATOM   1179  N   LYS    72       8.116  -0.244  -6.964  1.00  0.00
ATOM   1180  HN  LYS    72       9.002   0.015  -7.290  1.00  0.00
ATOM   1181  CA  LYS    72       6.963  -0.053  -7.846  1.00  0.00
ATOM   1182  HA  LYS    72       6.511   0.892  -7.580  1.00  0.00
ATOM   1183  CB  LYS    72       7.419   0.008  -9.305  1.00  0.00
ATOM   1184  HB1 LYS    72       8.261   0.680  -9.379  1.00  0.00
ATOM   1185  HB2 LYS    72       7.728  -0.979  -9.615  1.00  0.00
ATOM   1186  CG  LYS    72       6.339   0.491 -10.258  1.00  0.00
ATOM   1187  HG1 LYS    72       6.588   0.174 -11.260  1.00  0.00
ATOM   1188  HG2 LYS    72       5.394   0.057  -9.965  1.00  0.00
ATOM   1189  CD  LYS    72       6.214   2.005 -10.238  1.00  0.00
ATOM   1190  HD1 LYS    72       5.264   2.284 -10.669  1.00  0.00
ATOM   1191  HD2 LYS    72       6.261   2.347  -9.214  1.00  0.00
ATOM   1192  CE  LYS    72       7.329   2.668 -11.031  1.00  0.00
ATOM   1193  HE1 LYS    72       7.643   3.559 -10.508  1.00  0.00
ATOM   1194  HE2 LYS    72       8.160   1.981 -11.102  1.00  0.00
ATOM   1195  NZ  LYS    72       6.889   3.041 -12.403  1.00  0.00
ATOM   1196  HZ1 LYS    72       7.488   3.805 -12.775  1.00  0.00
ATOM   1197  HZ2 LYS    72       5.902   3.366 -12.386  1.00  0.00
ATOM   1198  HZ3 LYS    72       6.961   2.219 -13.037  1.00  0.00
ATOM   1199  C   LYS    72       5.915  -1.152  -7.680  1.00  0.00
ATOM   1200  O   LYS    72       4.723  -0.913  -7.869  1.00  0.00
ATOM   1201  N   LEU    73       6.357  -2.345  -7.305  1.00  0.00
ATOM   1202  HN  LEU    73       7.318  -2.480  -7.168  1.00  0.00
ATOM   1203  CA  LEU    73       5.446  -3.462  -7.101  1.00  0.00
ATOM   1204  HA  LEU    73       4.802  -3.527  -7.966  1.00  0.00
ATOM   1205  CB  LEU    73       6.231  -4.764  -6.964  1.00  0.00
ATOM   1206  HB1 LEU    73       6.470  -4.910  -5.922  1.00  0.00
ATOM   1207  HB2 LEU    73       7.152  -4.656  -7.512  1.00  0.00
ATOM   1208  CG  LEU    73       5.508  -6.014  -7.466  1.00  0.00
ATOM   1209  HG  LEU    73       4.553  -6.094  -6.966  1.00  0.00
ATOM   1210  CD1 LEU    73       6.315  -7.262  -7.145  1.00  0.00
ATOM   1211 HD11 LEU    73       6.321  -7.421  -6.076  1.00  0.00
ATOM   1212 HD12 LEU    73       7.328  -7.136  -7.496  1.00  0.00
ATOM   1213 HD13 LEU    73       5.868  -8.115  -7.633  1.00  0.00
ATOM   1214  CD2 LEU    73       5.247  -5.915  -8.961  1.00  0.00
ATOM   1215 HD21 LEU    73       4.982  -6.889  -9.345  1.00  0.00
ATOM   1216 HD22 LEU    73       6.138  -5.562  -9.459  1.00  0.00
ATOM   1217 HD23 LEU    73       4.437  -5.224  -9.140  1.00  0.00
ATOM   1218  C   LEU    73       4.587  -3.247  -5.861  1.00  0.00
ATOM   1219  O   LEU    73       3.375  -3.053  -5.958  1.00  0.00
ATOM   1220  N   PHE    74       5.218  -3.316  -4.693  1.00  0.00
ATOM   1221  HN  PHE    74       6.184  -3.474  -4.678  1.00  0.00
ATOM   1222  CA  PHE    74       4.513  -3.144  -3.434  1.00  0.00
ATOM   1223  HA  PHE    74       3.549  -3.622  -3.526  1.00  0.00
ATOM   1224  CB  PHE    74       5.290  -3.809  -2.305  1.00  0.00
ATOM   1225  HB1 PHE    74       6.174  -3.224  -2.095  1.00  0.00
ATOM   1226  HB2 PHE    74       5.587  -4.799  -2.614  1.00  0.00
ATOM   1227  CG  PHE    74       4.504  -3.929  -1.033  1.00  0.00
ATOM   1228  CD1 PHE    74       4.062  -5.163  -0.585  1.00  0.00
ATOM   1229  HD1 PHE    74       4.271  -6.043  -1.166  1.00  0.00
ATOM   1230  CD2 PHE    74       4.223  -2.807  -0.277  1.00  0.00
ATOM   1231  HD2 PHE    74       4.578  -1.842  -0.610  1.00  0.00
ATOM   1232  CE1 PHE    74       3.350  -5.272   0.593  1.00  0.00
ATOM   1233  HE1 PHE    74       3.006  -6.238   0.930  1.00  0.00
ATOM   1234  CE2 PHE    74       3.518  -2.911   0.903  1.00  0.00
ATOM   1235  HE2 PHE    74       3.316  -2.029   1.489  1.00  0.00
ATOM   1236  CZ  PHE    74       3.087  -4.144   1.342  1.00  0.00
ATOM   1237  HZ  PHE    74       2.524  -4.223   2.257  1.00  0.00
ATOM   1238  C   PHE    74       4.300  -1.670  -3.113  1.00  0.00
ATOM   1239  O   PHE    74       3.172  -1.236  -2.879  1.00  0.00
ATOM   1240  N   MET    75       5.392  -0.902  -3.095  1.00  0.00
ATOM   1241  HN  MET    75       6.262  -1.309  -3.281  1.00  0.00
ATOM   1242  CA  MET    75       5.324   0.529  -2.788  1.00  0.00
ATOM   1243  HA  MET    75       5.190   0.628  -1.721  1.00  0.00
ATOM   1244  CB  MET    75       6.617   1.240  -3.192  1.00  0.00
ATOM   1245  HB1 MET    75       6.403   2.289  -3.330  1.00  0.00
ATOM   1246  HB2 MET    75       6.964   0.834  -4.124  1.00  0.00
ATOM   1247  CG  MET    75       7.738   1.120  -2.171  1.00  0.00
ATOM   1248  HG1 MET    75       8.668   1.379  -2.652  1.00  0.00
ATOM   1249  HG2 MET    75       7.546   1.818  -1.373  1.00  0.00
ATOM   1250  SD  MET    75       7.907  -0.529  -1.461  1.00  0.00
ATOM   1251  CE  MET    75       7.869  -0.153   0.288  1.00  0.00
ATOM   1252  HE1 MET    75       8.136  -1.036   0.851  1.00  0.00
ATOM   1253  HE2 MET    75       6.875   0.161   0.564  1.00  0.00
ATOM   1254  HE3 MET    75       8.569   0.638   0.506  1.00  0.00
ATOM   1255  C   MET    75       4.136   1.176  -3.488  1.00  0.00
ATOM   1256  O   MET    75       3.495   2.073  -2.942  1.00  0.00
ATOM   1257  N   ALA    76       3.826   0.692  -4.687  1.00  0.00
ATOM   1258  HN  ALA    76       4.346  -0.055  -5.060  1.00  0.00
ATOM   1259  CA  ALA    76       2.659   1.177  -5.404  1.00  0.00
ATOM   1260  HA  ALA    76       2.666   2.259  -5.381  1.00  0.00
ATOM   1261  CB  ALA    76       2.669   0.723  -6.853  1.00  0.00
ATOM   1262  HB1 ALA    76       3.441   1.251  -7.393  1.00  0.00
ATOM   1263  HB2 ALA    76       1.706   0.935  -7.300  1.00  0.00
ATOM   1264  HB3 ALA    76       2.858  -0.338  -6.895  1.00  0.00
ATOM   1265  C   ALA    76       1.409   0.682  -4.714  1.00  0.00
ATOM   1266  O   ALA    76       0.613   1.472  -4.236  1.00  0.00
ATOM   1267  N   ASP    77       1.286  -0.640  -4.600  1.00  0.00
ATOM   1268  HN  ASP    77       1.977  -1.214  -4.989  1.00  0.00
ATOM   1269  CA  ASP    77       0.136  -1.260  -3.941  1.00  0.00
ATOM   1270  HA  ASP    77      -0.692  -1.239  -4.637  1.00  0.00
ATOM   1271  CB  ASP    77       0.454  -2.714  -3.586  1.00  0.00
ATOM   1272  HB1 ASP    77       1.280  -2.736  -2.891  1.00  0.00
ATOM   1273  HB2 ASP    77      -0.413  -3.164  -3.124  1.00  0.00
ATOM   1274  CG  ASP    77       0.831  -3.537  -4.802  1.00  0.00
ATOM   1275  OD1 ASP    77       0.295  -3.261  -5.896  1.00  0.00
ATOM   1276  OD2 ASP    77       1.666  -4.455  -4.661  1.00  0.00
ATOM   1277  C   ASP    77      -0.266  -0.491  -2.685  1.00  0.00
ATOM   1278  O   ASP    77      -1.436  -0.169  -2.498  1.00  0.00
ATOM   1279  N   LEU    78       0.718  -0.155  -1.857  1.00  0.00
ATOM   1280  HN  LEU    78       1.639  -0.417  -2.071  1.00  0.00
ATOM   1281  CA  LEU    78       0.464   0.617  -0.649  1.00  0.00
ATOM   1282  HA  LEU    78      -0.294   0.104  -0.077  1.00  0.00
ATOM   1283  CB  LEU    78       1.744   0.724   0.185  1.00  0.00
ATOM   1284  HB1 LEU    78       1.931   1.768   0.378  1.00  0.00
ATOM   1285  HB2 LEU    78       2.562   0.336  -0.402  1.00  0.00
ATOM   1286  CG  LEU    78       1.726  -0.016   1.529  1.00  0.00
ATOM   1287  HG  LEU    78       2.742  -0.221   1.827  1.00  0.00
ATOM   1288 CD1  LEU    78       0.998  -1.347   1.413  1.00  0.00
ATOM   1289 HD11 LEU    78      -0.066  -1.174   1.360  1.00  0.00
ATOM   1290 HD12 LEU    78       1.222  -1.955   2.277  1.00  0.00
ATOM   1291 HD13 LEU    78       1.327  -1.855   0.521  1.00  0.00
ATOM   1292  CD2 LEU    78       1.094   0.844   2.606  1.00  0.00
ATOM   1293 HD21 LEU    78       1.126   1.880   2.303  1.00  0.00
ATOM   1294 HD22 LEU    78       1.641   0.721   3.529  1.00  0.00
ATOM   1295 HD23 LEU    78       0.068   0.541   2.752  1.00  0.00
ATOM   1296  C   LEU    78      -0.045   2.009  -1.009  1.00  0.00
ATOM   1297  O   LEU    78      -1.164   2.385  -0.657  1.00  0.00
ATOM   1298  N   GLN    79       0.780   2.760  -1.731  1.00  0.00
ATOM   1299  HN  GLN    79       1.649   2.393  -1.995  1.00  0.00
ATOM   1300  CA  GLN    79       0.410   4.097  -2.184  1.00  0.00
ATOM   1301  HA  GLN    79       0.357   4.744  -1.321  1.00  0.00
ATOM   1302  CB  GLN    79       1.478   4.621  -3.154  1.00  0.00
ATOM   1303  HB1 GLN    79       1.727   3.833  -3.850  1.00  0.00
ATOM   1304  HB2 GLN    79       2.362   4.879  -2.591  1.00  0.00
ATOM   1305  CG  GLN    79       1.052   5.840  -3.958  1.00  0.00
ATOM   1306  HG1 GLN    79       0.674   5.507  -4.913  1.00  0.00
ATOM   1307  HG2 GLN    79       0.270   6.356  -3.421  1.00  0.00
ATOM   1308  CD  GLN    79       2.194   6.807  -4.202  1.00  0.00
ATOM   1309  OE1 GLN    79       2.596   7.551  -3.307  1.00  0.00
ATOM   1310  NE2 GLN    79       2.722   6.801  -5.420  1.00  0.00
ATOM   1311 HE21 GLN    79       3.462   7.416  -5.607  1.00  0.00
ATOM   1312 HE22 GLN    79       2.350   6.182  -6.083  1.00  0.00
ATOM   1313  C   GLN    79      -0.953   4.061  -2.870  1.00  0.00
ATOM   1314  O   GLN    79      -1.745   4.997  -2.768  1.00  0.00
ATOM   1315  N   ARG    80      -1.205   2.961  -3.563  1.00  0.00
ATOM   1316  HN  ARG    80      -0.522   2.263  -3.602  1.00  0.00
ATOM   1317  CA  ARG    80      -2.439   2.755  -4.287  1.00  0.00
ATOM   1318  HA  ARG    80      -2.705   3.686  -4.766  1.00  0.00
ATOM   1319  CB  ARG    80      -2.211   1.682  -5.363  1.00  0.00
ATOM   1320  HB1 ARG    80      -1.153   1.505  -5.449  1.00  0.00
ATOM   1321  HB2 ARG    80      -2.686   0.767  -5.059  1.00  0.00
ATOM   1322  CG  ARG    80      -2.725   2.063  -6.740  1.00  0.00
ATOM   1323  HG1 ARG    80      -2.057   2.795  -7.171  1.00  0.00
ATOM   1324  HG2 ARG    80      -2.742   1.180  -7.363  1.00  0.00
ATOM   1325  CD  ARG    80      -4.122   2.649  -6.682  1.00  0.00
ATOM   1326  HD1 ARG    80      -4.422   2.735  -5.653  1.00  0.00
ATOM   1327  HD2 ARG    80      -4.792   1.982  -7.193  1.00  0.00
ATOM   1328  NE  ARG    80      -4.186   3.966  -7.310  1.00  0.00
ATOM   1329  HE  ARG    80      -3.338   4.403  -7.534  1.00  0.00
ATOM   1330  CZ  ARG    80      -5.322   4.595  -7.594  1.00  0.00
ATOM   1331  NH1 ARG    80      -6.486   4.030  -7.305  1.00  0.00
ATOM   1332 HH11 ARG    80      -7.339   4.505  -7.519  1.00  0.00
ATOM   1333 HH12 ARG    80      -6.509   3.129  -6.872  1.00  0.00
ATOM   1334  NH2 ARG    80      -5.294   5.790  -8.168  1.00  0.00
ATOM   1335 HH21 ARG    80      -4.418   6.219  -8.386  1.00  0.00
ATOM   1336 HH22 ARG    80      -6.149   6.263  -8.380  1.00  0.00
ATOM   1337  C   ARG    80      -3.562   2.353  -3.329  1.00  0.00
ATOM   1338  O   ARG    80      -4.715   2.740  -3.513  1.00  0.00
ATOM   1339  N   VAL    81      -3.210   1.620  -2.273  1.00  0.00
ATOM   1340  HN  VAL    81      -2.271   1.367  -2.155  1.00  0.00
ATOM   1341  CA  VAL    81      -4.189   1.231  -1.261  1.00  0.00
ATOM   1342  HA  VAL    81      -4.947   0.630  -1.742  1.00  0.00
ATOM   1343  CB  VAL    81      -3.543   0.387  -0.129  1.00  0.00
ATOM   1344  HB  VAL    81      -2.648   0.893   0.201  1.00  0.00
ATOM   1345  CG1 VAL    81      -3.147  -0.988  -0.645  1.00  0.00
ATOM   1346 HG11 VAL    81      -2.073  -1.089  -0.614  1.00  0.00
ATOM   1347 HG12 VAL    81      -3.491  -1.105  -1.661  1.00  0.00
ATOM   1348 HG13 VAL    81      -3.597  -1.750  -0.023  1.00  0.00
ATOM   1349  CG2 VAL    81      -4.476   0.247   1.070  1.00  0.00
ATOM   1350 HG21 VAL    81      -5.364  -0.291   0.774  1.00  0.00
ATOM   1351 HG22 VAL    81      -4.752   1.228   1.429  1.00  0.00
ATOM   1352 HG23 VAL    81      -3.972  -0.295   1.857  1.00  0.00
ATOM   1353  C   VAL    81      -4.844   2.481  -0.674  1.00  0.00
ATOM   1354  O   VAL    81      -6.050   2.507  -0.427  1.00  0.00
ATOM   1355  N   PHE    82      -4.037   3.515  -0.459  1.00  0.00
ATOM   1356  HN  PHE    82      -3.086   3.434  -0.684  1.00  0.00
ATOM   1357  CA  PHE    82      -4.533   4.774   0.080  1.00  0.00
ATOM   1358  HA  PHE    82      -5.269   4.545   0.837  1.00  0.00
ATOM   1359  CB  PHE    82      -3.390   5.572   0.717  1.00  0.00
ATOM   1360  HB1 PHE    82      -2.807   6.034  -0.065  1.00  0.00
ATOM   1361  HB2 PHE    82      -3.810   6.342   1.348  1.00  0.00
ATOM   1362  CG  PHE    82      -2.455   4.746   1.561  1.00  0.00
ATOM   1363  CD1 PHE    82      -2.850   3.520   2.077  1.00  0.00
ATOM   1364  HD1 PHE    82      -3.841   3.149   1.861  1.00  0.00
ATOM   1365  CD2 PHE    82      -1.180   5.209   1.850  1.00  0.00
ATOM   1366  HD2 PHE    82      -0.862   6.163   1.457  1.00  0.00
ATOM   1367  CE1 PHE    82      -1.988   2.768   2.853  1.00  0.00
ATOM   1368  HE1 PHE    82      -2.307   1.815   3.248  1.00  0.00
ATOM   1369  CE2 PHE    82      -0.316   4.462   2.627  1.00  0.00
ATOM   1370  HE2 PHE    82       0.675   4.834   2.842  1.00  0.00
ATOM   1371  CZ  PHE    82      -0.721   3.242   3.131  1.00  0.00
ATOM   1372  HZ  PHE    82      -0.047   2.659   3.741  1.00  0.00
ATOM   1373  C   PHE    82      -5.194   5.601  -1.016  1.00  0.00
ATOM   1374  O   PHE    82      -6.353   5.997  -0.895  1.00  0.00
ATOM   1375  N   THR    83      -4.450   5.849  -2.089  1.00  0.00
ATOM   1376  HN  THR    83      -3.536   5.499  -2.129  1.00  0.00
ATOM   1377  CA  THR    83      -4.968   6.616  -3.215  1.00  0.00
ATOM   1378  HA  THR    83      -5.151   7.624  -2.875  1.00  0.00
ATOM   1379  CB  THR    83      -3.941   6.649  -4.350  1.00  0.00
ATOM   1380  HB  THR    83      -3.649   5.637  -4.588  1.00  0.00
ATOM   1381  OG1 THR    83      -2.784   7.365  -3.955  1.00  0.00
ATOM   1382  HG1 THR    83      -2.246   6.813  -3.382  1.00  0.00
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REPLACEMENT SHEET

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ATOM   1383  CG2 THR    83      -4.464   7.286  -5.619  1.00  0.00
ATOM   1384 HG21 THR    83      -3.654   7.404  -6.323  1.00  0.00
ATOM   1385 HG22 THR    83      -4.884   8.255  -5.389  1.00  0.00
ATOM   1386 HG23 THR    83      -5.228   6.656  -6.049  1.00  0.00
ATOM   1387  C   THR    83      -6.278   6.017  -3.711  1.00  0.00
ATOM   1388  O   THR    83      -7.221   6.740  -4.033  1.00  0.00
ATOM   1389  N   ASN    84      -6.333   4.690  -3.756  1.00  0.00
ATOM   1390  HN  ASN    84      -5.550   4.170  -3.476  1.00  0.00
ATOM   1391  CA  ASN    84      -7.533   3.987  -4.190  1.00  0.00
ATOM   1392  HA  ASN    84      -7.822   4.381  -5.153  1.00  0.00
ATOM   1393  CB  ASN    84      -7.250   2.491  -4.321  1.00  0.00
ATOM   1394  HB1 ASN    84      -6.457   2.342  -5.039  1.00  0.00
ATOM   1395  HB2 ASN    84      -6.939   2.107  -3.362  1.00  0.00
ATOM   1396  CG  ASN    84      -8.464   1.707  -4.778  1.00  0.00
ATOM   1397  OD1 ASN    84      -9.459   2.282  -5.218  1.00  0.00
ATOM   1398  ND2 ASN    84      -8.388   0.385  -4.672  1.00  0.00
ATOM   1399 HD21 ASN    84      -7.564  -0.004  -4.312  1.00  0.00
ATOM   1400 HD22 ASN    84      -9.158  -0.147  -4.960  1.00  0.00
ATOM   1401  C   ASN    84      -8.670   4.212  -3.201  1.00  0.00
ATOM   1402  O   ASN    84      -9.656   4.879  -3.514  1.00  0.00
ATOM   1403  N   CYS    85      -8.520   3.657  -2.003  1.00  0.00
ATOM   1404  HN  CYS    85      -7.708   3.142  -1.812  1.00  0.00
ATOM   1405  CA  CYS    85      -9.526   3.808  -0.961  1.00  0.00
ATOM   1406  HA  CYS    85     -10.414   3.280  -1.276  1.00  0.00
ATOM   1407  CB  CYS    85      -9.028   3.205   0.354  1.00  0.00
ATOM   1408  HB1 CYS    85      -9.789   3.329   1.109  1.00  0.00
ATOM   1409  HB2 CYS    85      -8.132   3.724   0.665  1.00  0.00
ATOM   1410  SG  CYS    85      -8.635   1.443   0.257  1.00  0.00
ATOM   1411  HG  CYS    85      -9.362   0.955   0.652  1.00  0.00
ATOM   1412  C   CYS    85      -9.873   5.278  -0.759  1.00  0.00
ATOM   1413  O   CYS    85     -10.996   5.613  -0.398  1.00  0.00
ATOM   1414  N   LYS    86      -8.898   6.150  -0.993  1.00  0.00
ATOM   1415  HN  LYS    86      -8.021   5.820  -1.281  1.00  0.00
ATOM   1416  CA  LYS    86      -9.102   7.586  -0.840  1.00  0.00
ATOM   1417  HA  LYS    86      -9.725   7.741   0.029  1.00  0.00
ATOM   1418  CB  LYS    86      -7.758   8.290  -0.623  1.00  0.00
ATOM   1419  HB1 LYS    86      -7.355   7.984   0.330  1.00  0.00
ATOM   1420  HB2 LYS    86      -7.078   7.990  -1.405  1.00  0.00
ATOM   1421  CG  LYS    86      -7.853   9.807  -0.632  1.00  0.00
ATOM   1422  HG1 LYS    86      -8.858  10.091  -0.901  1.00  0.00
ATOM   1423  HG2 LYS    86      -7.625  10.178   0.356  1.00  0.00
ATOM   1424  CD  LYS    86      -6.882  10.424  -1.626  1.00  0.00
ATOM   1425  HD1 LYS    86      -7.437  11.020  -2.334  1.00  0.00
ATOM   1426  HD2 LYS    86      -6.363   9.633  -2.147  1.00  0.00
ATOM   1427  CE  LYS    86      -5.860  11.308  -0.930  1.00  0.00
ATOM   1428  HE1 LYS    86      -5.744  10.970   0.090  1.00  0.00
ATOM   1429  HE2 LYS    86      -4.916  11.221  -1.447  1.00  0.00
ATOM   1430  NZ  LYS    86      -6.276  12.738  -0.922  1.00  0.00
ATOM   1431  HZ1 LYS    86      -6.207  13.125   0.041  1.00  0.00
ATOM   1432  HZ2 LYS    86      -7.260  12.825  -1.249  1.00  0.00
ATOM   1433  HZ3 LYS    86      -5.663  13.292  -1.552  1.00  0.00
ATOM   1434  C   LYS    86      -9.805   8.175  -2.060  1.00  0.00
ATOM   1435  O   LYS    86     -10.579   9.126  -1.943  1.00  0.00
ATOM   1436  N   GLU    87      -9.518   7.615  -3.230  1.00  0.00
ATOM   1437  HN  GLU    87      -8.883   6.869  -3.259  1.00  0.00
ATOM   1438  CA  GLU    87     -10.101   8.103  -4.474  1.00  0.00
ATOM   1439  HA  GLU    87     -10.101   9.183  -4.435  1.00  0.00
ATOM   1440  CB  GLU    87      -9.256   7.649  -5.665  1.00  0.00
ATOM   1441  HB1 GLU    87      -9.884   7.607  -6.542  1.00  0.00
ATOM   1442  HB2 GLU    87      -8.869   6.662  -5.462  1.00  0.00
ATOM   1443  CG  GLU    87      -8.084   8.570  -5.963  1.00  0.00
ATOM   1444  HG1 GLU    87      -7.726   8.989  -5.033  1.00  0.00
ATOM   1445  HG2 GLU    87      -7.296   7.993  -6.424  1.00  0.00
ATOM   1446  CD  GLU    87      -8.460   9.707  -6.893  1.00  0.00
ATOM   1447  OE1 GLU    87      -9.484   9.583  -7.597  1.00  0.00
ATOM   1448  OE2 GLU    87      -7.732  10.721  -6.916  1.00  0.00
ATOM   1449  C   GLU    87     -11.539   7.621  -4.645  1.00  0.00
ATOM   1450  O   GLU    87     -12.422   8.397  -5.010  1.00  0.00
ATOM   1451  N   TYR    88     -11.769   6.338  -4.387  1.00  0.00
ATOM   1452  HN  TYR    88     -11.023   5.763  -4.109  1.00  0.00
ATOM   1453  CA  TYR    88     -13.100   5.757  -4.536  1.00  0.00
ATOM   1454  HA  TYR    88     -13.528   6.144  -5.449  1.00  0.00
ATOM   1455  CB  TYR    88     -13.000   4.234  -4.639  1.00  0.00
ATOM   1456  HB1 TYR    88     -12.032   3.971  -5.040  1.00  0.00
ATOM   1457  HB2 TYR    88     -13.104   3.806  -3.653  1.00  0.00
ATOM   1458  CG  TYR    88     -14.054   3.612  -5.527  1.00  0.00
ATOM   1459  CD1 TYR    88     -15.165   2.982  -4.982  1.00  0.00
ATOM   1460  HD1 TYR    88     -15.273   2.942  -3.908  1.00  0.00
ATOM   1461  CD2 TYR    88     -13.935   3.651  -6.911  1.00  0.00
ATOM   1462  HD2 TYR    88     -13.076   4.136  -7.350  1.00  0.00
ATOM   1463  CE1 TYR    88     -16.130   2.410  -5.790  1.00  0.00
ATOM   1464  HE1 TYR    88     -16.987   1.925  -5.347  1.00  0.00
ATOM   1465  CE2 TYR    88     -14.894   3.081  -7.726  1.00  0.00
ATOM   1466  HE2 TYR    88     -14.785   3.122  -8.800  1.00  0.00
ATOM   1467  CZ  TYR    88     -15.990   2.463  -7.161  1.00  0.00
ATOM   1468  OH  TYR    88     -16.947   1.893  -7.969  1.00  0.00
ATOM   1469  HH  TYR    88     -17.473   2.584  -8.378  1.00  0.00
ATOM   1470  C   TYR    88     -14.010   6.137  -3.368  1.00  0.00
ATOM   1471  O   TYR    88     -14.555   5.265  -2.691  1.00  0.00
ATOM   1472  N   ASN    89     -14.187   7.439  -3.150  1.00  0.00
ATOM   1473  HN  ASN    89     -13.737   8.087  -3.727  1.00  0.00
ATOM   1474  CA  ASN    89     -15.038   7.925  -2.070  1.00  0.00
ATOM   1475  HA  ASN    89     -15.652   7.102  -1.736  1.00  0.00
ATOM   1476  CB  ASN    89     -14.185   8.416  -0.899  1.00  0.00
ATOM   1477  HB1 ASN    89     -14.820   8.581  -0.042  1.00  0.00
ATOM   1478  HB2 ASN    89     -13.706   9.344  -1.173  1.00  0.00
ATOM   1479  CG  ASN    89     -13.113   7.419  -0.517  1.00  0.00
ATOM   1480  OD1 ASN    89     -12.001   7.796  -0.149  1.00  0.00
ATOM   1481  ND2 ASN    89     -13.444   6.136  -0.609  1.00  0.00
ATOM   1482 HD21 ASN    89     -12.769   5.467  -0.377  1.00  0.00
ATOM   1483 HD22 ASN    89     -14.348   5.910  -0.912  1.00  0.00
ATOM   1484  C   ASN    89     -15.944   9.048  -2.552  1.00  0.00
ATOM   1485  O   ASN    89     -15.701  10.222  -2.272  1.00  0.00
ATOM   1486  N   ALA    90     -16.997   8.680  -3.272  1.00  0.00
ATOM   1487  HN  ALA    90     -17.141   7.728  -3.456  1.00  0.00
ATOM   1488  CA  ALA    90     -17.954   9.655  -3.783  1.00  0.00
ATOM   1489  HA  ALA    90     -17.486  10.184  -4.599  1.00  0.00
ATOM   1490  CB  ALA    90     -19.185   8.946  -4.326  1.00  0.00
ATOM   1491  HB1 ALA    90     -19.230   7.944  -3.926  1.00  0.00
ATOM   1492  HB2 ALA    90     -19.128   8.901  -5.404  1.00  0.00
ATOM   1493  HB3 ALA    90     -20.072   9.490  -4.035  1.00  0.00
ATOM   1494  C   ALA    90     -18.356  10.662  -2.705  1.00  0.00
ATOM   1495  O   ALA    90     -18.383  11.868  -2.952  1.00  0.00
ATOM   1496  N   PRO    91     -18.657  10.179  -1.487  1.00  0.00
ATOM   1497  CA  PRO    91     -19.087  11.013  -0.381  1.00  0.00
ATOM   1498  HA  PRO    91     -19.505  11.951  -0.717  1.00  0.00
ATOM   1499  CB  PRO    91     -20.176  10.140   0.237  1.00  0.00
ATOM   1500  HB1 PRO    91     -20.271  10.369   1.289  1.00  0.00
ATOM   1501  HB2 PRO    91     -21.115  10.323  -0.263  1.00  0.00
ATOM   1502  CG  PRO    91     -19.704   8.730   0.022  1.00  0.00
ATOM   1503  HG1 PRO    91     -20.537   8.104  -0.258  1.00  0.00
ATOM   1504  HG2 PRO    91     -19.249   8.358   0.929  1.00  0.00
ATOM   1505  CD  PRO    91     -18.679   8.764  -1.094  1.00  0.00
ATOM   1506  HD1 PRO    91     -17.713   8.452  -0.724  1.00  0.00
ATOM   1507  HD2 PRO    91     -18.988   8.139  -1.919  1.00  0.00
ATOM   1508  C   PRO    91     -17.976  11.268   0.633  1.00  0.00
ATOM   1509  O   PRO    91     -18.242  11.671   1.766  1.00  0.00
ATOM   1510  N   GLU    92     -16.734  11.007   0.234  1.00  0.00
ATOM   1511  HN  GLU    92     -16.582  10.671  -0.674  1.00  0.00
ATOM   1512  CA  GLU    92     -15.596  11.174   1.132  1.00  0.00
ATOM   1513  HA  GLU    92     -14.728  10.745   0.654  1.00  0.00
ATOM   1514  CB  GLU    92     -15.340  12.658   1.408  1.00  0.00
ATOM   1515  HB1 GLU    92     -14.454  12.750   2.020  1.00  0.00
ATOM   1516  HB2 GLU    92     -16.183  13.062   1.949  1.00  0.00
ATOM   1517  CG  GLU    92     -15.139  13.487   0.150  1.00  0.00
ATOM   1518  HG1 GLU    92     -15.062  12.821  -0.696  1.00  0.00
ATOM   1519  HG2 GLU    92     -15.993  14.135   0.021  1.00  0.00
ATOM   1520  CD  GLU    92     -13.888  14.343   0.208  1.00  0.00
ATOM   1521  OE1 GLU    92     -13.118  14.335  -0.775  1.00  0.00
ATOM   1522  OE2 GLU    92     -13.679  15.021   1.236  1.00  0.00
ATOM   1523  C   GLU    92     -15.843  10.432   2.436  1.00  0.00
ATOM   1524  O   GLU    92     -15.529  10.925   3.519  1.00  0.00
ATOM   1525  N   SER    93     -16.427   9.248   2.313  1.00  0.00
ATOM   1526  HN  SER    93     -16.649   8.919   1.417  1.00  0.00
ATOM   1527  CA  SER    93     -16.725   8.412   3.463  1.00  0.00
ATOM   1528  HA  SER    93     -17.495   8.899   4.042  1.00  0.00
ATOM   1529  CB  SER    93     -17.234   7.048   2.986  1.00  0.00
ATOM   1530  HB1 SER    93     -17.222   6.350   3.809  1.00  0.00
ATOM   1531  HB2 SER    93     -18.243   7.152   2.615  1.00  0.00
ATOM   1532  OG  SER    93     -16.418   6.536   1.947  1.00  0.00
ATOM   1533  HG  SER    93     -16.849   6.678   1.101  1.00  0.00
ATOM   1534  C   SER    93     -15.490   8.232   4.335  1.00  0.00
ATOM   1535  O   SER    93     -14.447   8.833   4.082  1.00  0.00
ATOM   1536  N   GLU    94     -15.601   7.370   5.338  1.00  0.00
ATOM   1537  HN  GLU    94     -16.455   6.913   5.485  1.00  0.00
ATOM   1538  CA  GLU    94     -14.485   7.092   6.230  1.00  0.00
ATOM   1539  HA  GLU    94     -14.213   8.017   6.717  1.00  0.00
ATOM   1540  CB  GLU    94     -14.901   6.073   7.292  1.00  0.00
ATOM   1541  HB1 GLU    94     -14.489   5.109   7.031  1.00  0.00
ATOM   1542  HB2 GLU    94     -15.979   6.003   7.305  1.00  0.00
ATOM   1543  CG  GLU    94     -14.430   6.427   8.693  1.00  0.00
ATOM   1544  HG1 GLU    94     -13.574   7.082   8.616  1.00  0.00
ATOM   1545  HG2 GLU    94     -15.229   6.939   9.209  1.00  0.00
ATOM   1546  CD  GLU    94     -14.035   5.207   9.502  1.00  0.00
ATOM   1547  OE1 GLU    94     -13.155   5.336  10.379  1.00  0.00
ATOM   1548  OE2 GLU    94     -14.604   4.123   9.257  1.00  0.00
ATOM   1549  C   GLU    94     -13.274   6.569   5.457  1.00  0.00
ATOM   1550  O   GLU    94     -12.160   6.551   5.979  1.00  0.00
ATOM   1551  N   TYR    95     -13.493   6.137   4.214  1.00  0.00
ATOM   1552  HN  TYR    95     -14.397   6.168   3.841  1.00  0.00
ATOM   1553  CA  TYR    95     -12.412   5.611   3.393  1.00  0.00
ATOM   1554  HA  TYR    95     -11.977   4.775   3.916  1.00  0.00
ATOM   1555  CB  TYR    95     -12.947   5.131   2.045  1.00  0.00
ATOM   1556  HB1 TYR    95     -13.630   5.870   1.653  1.00  0.00
ATOM   1557  HB2 TYR    95     -12.119   5.016   1.365  1.00  0.00
ATOM   1558  CG  TYR    95     -13.678   3.807   2.104  1.00  0.00
ATOM   1559  CD1 TYR    95     -13.724   2.972   0.996  1.00  0.00
ATOM   1560  HD1 TYR    95     -13.227   3.279   0.087  1.00  0.00
ATOM   1561  CD2 TYR    95     -14.325   3.394   3.263  1.00  0.00
ATOM   1562  HD2 TYR    95     -14.303   4.030   4.132  1.00  0.00
ATOM   1563  CE1 TYR    95     -14.390   1.762   1.040  1.00  0.00
ATOM   1564  HE1 TYR    95     -14.413   1.126   0.167  1.00  0.00
ATOM   1565  CE2 TYR    95     -14.994   2.187   3.314  1.00  0.00
ATOM   1566  HE2 TYR    95     -15.487   1.884   4.227  1.00  0.00
ATOM   1567  CZ  TYR    95     -15.023   1.374   2.202  1.00  0.00
ATOM   1568  OH  TYR    95     -15.687   0.170   2.250  1.00  0.00
ATOM   1569  HH  TYR    95     -15.095  -0.534   1.974  1.00  0.00
ATOM   1570  C   TYR    95     -11.338   6.671   3.177  1.00  0.00
ATOM   1571  O   TYR    95     -10.170   6.352   2.951  1.00  0.00
ATOM   1572  N   TYR    96     -11.743   7.934   3.243  1.00  0.00
ATOM   1573  HN  TYR    96     -12.686   8.125   3.432  1.00  0.00
ATOM   1574  CA  TYR    96     -10.816   9.045   3.073  1.00  0.00
ATOM   1575  HA  TYR    96     -10.140   8.795   2.268  1.00  0.00
ATOM   1576  CB  TYR    96     -11.579  10.321   2.712  1.00  0.00
ATOM   1577  HB1 TYR    96     -12.376  10.073   2.027  1.00  0.00
ATOM   1578  HB2 TYR    96     -12.001  10.745   3.611  1.00  0.00
ATOM   1579  CG  TYR    96     -10.717  11.378   2.060  1.00  0.00
ATOM   1580  CD1 TYR    96     -10.257  11.219   0.759  1.00  0.00
ATOM   1581  HD1 TYR    96     -10.524  10.326   0.213  1.00  0.00
ATOM   1582  CD2 TYR    96     -10.364  12.533   2.745  1.00  0.00
ATOM   1583  HD2 TYR    96     -10.714  12.672   3.758  1.00  0.00
ATOM   1584  CE1 TYR    96      -9.471  12.183   0.159  1.00  0.00
ATOM   1585  HE1 TYR    96      -9.120  12.039  -0.852  1.00  0.00
ATOM   1586  CE2 TYR    96      -9.576  13.501   2.152  1.00  0.00
ATOM   1587  HE2 TYR    96      -9.312  14.393   2.701  1.00  0.00
ATOM   1588  CZ  TYR    96      -9.131  13.320   0.859  1.00  0.00
ATOM   1589  OH  TYR    96      -8.347  14.282   0.265  1.00  0.00
ATOM   1590  HH  TYR    96      -8.832  14.690  -0.456  1.00  0.00
ATOM   1591  C   TYR    96     -10.009   9.267   4.346  1.00  0.00
ATOM   1592  O   TYR    96      -8.884   9.764   4.303  1.00  0.00
ATOM   1593  N   LYS    97     -10.593   8.888   5.478  1.00  0.00
ATOM   1594  HN  LYS    97     -11.496   8.503   5.445  1.00  0.00
ATOM   1595  CA  LYS    97      -9.937   9.050   6.771  1.00  0.00
ATOM   1596  HA  LYS    97      -9.515  10.043   6.806  1.00  0.00
ATOM   1597  CB  LYS    97     -10.960   8.901   7.898  1.00  0.00
ATOM   1598  HB1 LYS    97     -11.380   7.906   7.859  1.00  0.00
ATOM   1599  HB2 LYS    97     -10.457   9.033   8.845  1.00  0.00
ATOM   1600  CG  LYS    97     -12.100   9.903   7.820  1.00  0.00
ATOM   1601  HG1 LYS    97     -12.840   9.537   7.124  1.00  0.00
ATOM   1602  HG2 LYS    97     -11.711  10.849   7.473  1.00  0.00
ATOM   1603  CD  LYS    97     -12.756  10.107   9.176  1.00  0.00
ATOM   1604  HD1 LYS    97     -13.665  10.674   9.042  1.00  0.00
ATOM   1605  HD2 LYS    97     -12.990   9.142   9.601  1.00  0.00
ATOM   1606  CE  LYS    97     -11.842  10.857  10.131  1.00  0.00
ATOM   1607  HE1 LYS    97     -10.927  11.105   9.614  1.00  0.00
ATOM   1608  HE2 LYS    97     -11.618  10.218  10.972  1.00  0.00
ATOM   1609  NZ  LYS    97     -12.471  12.111  10.629  1.00  0.00
ATOM   1610  HZ1 LYS    97     -11.831  12.917  10.478  1.00  0.00
ATOM   1611  HZ2 LYS    97     -12.672  12.031  11.646  1.00  0.00
ATOM   1612  HZ3 LYS    97     -13.362  12.289  10.123  1.00  0.00
ATOM   1613  C   LYS    97      -8.816   8.031   6.955  1.00  0.00
ATOM   1614  O   LYS    97      -7.664   8.395   7.189  1.00  0.00
ATOM   1615  N   CYS    98      -9.167   6.753   6.861  1.00  0.00
ATOM   1616  HN  CYS    98     -10.105   6.529   6.684  1.00  0.00
ATOM   1617  CA  CYS    98      -8.203   5.671   7.039  1.00  0.00
ATOM   1618  HA  CYS    98      -7.970   5.609   8.092  1.00  0.00
ATOM   1619  CB  CYS    98      -8.816   4.348   6.588  1.00  0.00
ATOM   1620  HB1 CYS    98      -8.039   3.600   6.531  1.00  0.00
ATOM   1621  HB2 CYS    98      -9.554   4.040   7.311  1.00  0.00
ATOM   1622  SG  CYS    98      -9.627   4.426   4.976  1.00  0.00
ATOM   1623  HG  CYS    98     -10.366   5.034   5.045  1.00  0.00
ATOM   1624  C   CYS    98      -6.914   5.931   6.268  1.00  0.00
ATOM   1625  O   CYS    98      -5.817   5.796   6.814  1.00  0.00
ATOM   1626  N   ALA    99      -7.045   6.278   4.991  1.00  0.00
ATOM   1627  HN  ALA    99      -7.939   6.375   4.607  1.00  0.00
ATOM   1628  CA  ALA    99      -5.885   6.551   4.158  1.00  0.00
ATOM   1629  HA  ALA    99      -5.339   5.629   4.029  1.00  0.00
ATOM   1630  CB  ALA    99      -6.319   7.042   2.785  1.00  0.00
ATOM   1631  HB1 ALA    99      -6.855   6.255   2.275  1.00  0.00
ATOM   1632  HB2 ALA    99      -5.448   7.317   2.209  1.00  0.00
ATOM   1633  HB3 ALA    99      -6.963   7.902   2.897  1.00  0.00
ATOM   1634  C   ALA    99      -4.977   7.570   4.828  1.00  0.00
ATOM   1635  O   ALA    99      -3.764   7.398   4.871  1.00  0.00
ATOM   1636  N   ASN   100      -5.581   8.613   5.379  1.00  0.00
ATOM   1637  HN  ASN   100      -6.555   8.685   5.321  1.00  0.00
ATOM   1638  CA  ASN   100      -4.826   9.660   6.054  1.00  0.00
ATOM   1639  HA  ASN   100      -4.202  10.142   5.316  1.00  0.00
ATOM   1640  CB  ASN   100      -5.778  10.695   6.658  1.00  0.00
ATOM   1641  HB1 ASN   100      -6.720  10.660   6.130  1.00  0.00
ATOM   1642  HB2 ASN   100      -5.943  10.459   7.699  1.00  0.00
ATOM   1643  CG  ASN   100      -5.230  12.106   6.568  1.00  0.00
ATOM   1644  OD1 ASN   100      -5.097  12.798   7.577  1.00  0.00
ATOM   1645  ND2 ASN   100      -4.910  12.541   5.354  1.00  0.00
ATOM   1646 HD21 ASN   100      -4.553  13.449   5.267  1.00  0.00
ATOM   1647 HD22 ASN   100      -5.042  11.934   4.595  1.00  0.00
ATOM   1648  C   ASN   100      -3.935   9.073   7.144  1.00  0.00
ATOM   1649  O   ASN   100      -2.862   9.602   7.434  1.00  0.00
ATOM   1650  N   ILE   101      -4.386   7.975   7.743  1.00  0.00
ATOM   1651  HN  ILE   101      -5.248   7.599   7.467  1.00  0.00
ATOM   1652  CA  ILE   101      -3.630   7.318   8.803  1.00  0.00
ATOM   1653  HA  ILE   101      -3.193   8.088   9.422  1.00  0.00
ATOM   1654  CB  ILE   101      -4.541   6.453   9.691  1.00  0.00
ATOM   1655  HB  ILE   101      -4.890   5.616   9.105  1.00  0.00
ATOM   1656 CG1  ILE   101      -5.743   7.274  10.166  1.00  0.00
ATOM   1657 HG11 ILE   101      -6.325   7.575   9.308  1.00  0.00
ATOM   1658 HG12 ILE   101      -5.387   8.153  10.682  1.00  0.00
ATOM   1659 CG2  ILE   101      -3.761   5.909  10.879  1.00  0.00
ATOM   1660 HG21 ILE   101      -4.431   5.373  11.534  1.00  0.00
ATOM   1661 HG22 ILE   101      -3.308   6.727  11.418  1.00  0.00
ATOM   1662 HG23 ILE   101      -2.990   5.240  10.526  1.00  0.00
ATOM   1663  CD1  ILE   101      -6.658   6.523  11.107  1.00  0.00
ATOM   1664 HD11 ILE   101      -7.168   7.226  11.749  1.00  0.00
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REPLACEMENT SHEET

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ATOM   1665 HD12 ILE   101      -6.075   5.842  11.709  1.00  0.00
ATOM   1666 HD13 ILE   101      -7.384   5.966  10.534  1.00  0.00
ATOM   1667  C   ILE   101      -2.511   6.457   8.226  1.00  0.00
ATOM   1668  O   ILE   101      -1.335   6.807   8.332  1.00  0.00
ATOM   1669  N   LEU   102      -2.876   5.343   7.590  1.00  0.00
ATOM   1670  HN  LEU   102      -3.829   5.117   7.527  1.00  0.00
ATOM   1671  CA  LEU   102      -1.886   4.457   6.972  1.00  0.00
ATOM   1672  HA  LEU   102      -1.350   3.953   7.763  1.00  0.00
ATOM   1673  CB  LEU   102      -2.569   3.416   6.082  1.00  0.00
ATOM   1674  HB1 LEU   102      -3.630   3.443   6.283  1.00  0.00
ATOM   1675  HB2 LEU   102      -2.408   3.700   5.053  1.00  0.00
ATOM   1676  CG  LEU   102      -2.083   1.971   6.260  1.00  0.00
ATOM   1677  HG  LEU   102      -2.423   1.382   5.420  1.00  0.00
ATOM   1678  CD1 LEU   102      -2.676   1.364   7.523  1.00  0.00
ATOM   1679 HD11 LEU   102      -1.943   1.395   8.316  1.00  0.00
ATOM   1680 HD12 LEU   102      -2.958   0.338   7.332  1.00  0.00
ATOM   1681 HD13 LEU   102      -3.549   1.928   7.818  1.00  0.00
ATOM   1682  CD2 LEU   102      -0.559   1.903   6.290  1.00  0.00
ATOM   1683 HD21 LEU   102      -0.147   2.788   5.827  1.00  0.00
ATOM   1684 HD22 LEU   102      -0.224   1.027   5.749  1.00  0.00
ATOM   1685 HD23 LEU   102      -0.220   1.841   7.313  1.00  0.00
ATOM   1686  C   LEU   102      -0.897   5.265   6.139  1.00  0.00
ATOM   1687  O   LEU   102       0.301   4.991   6.137  1.00  0.00
ATOM   1688  N   GLU   103      -1.414   6.266   5.433  1.00  0.00
ATOM   1689  HN  GLU   103      -2.377   6.439   5.484  1.00  0.00
ATOM   1690  CA  GLU   103      -0.581   7.132   4.612  1.00  0.00
ATOM   1691  HA  GLU   103      -0.056   6.514   3.900  1.00  0.00
ATOM   1692  CB  GLU   103      -1.446   8.146   3.857  1.00  0.00
ATOM   1693  HB1 GLU   103      -1.912   8.808   4.572  1.00  0.00
ATOM   1694  HB2 GLU   103      -2.220   7.612   3.320  1.00  0.00
ATOM   1695  CG  GLU   103      -0.670   8.991   2.860  1.00  0.00
ATOM   1696  HG1 GLU   103      -1.083   8.832   1.874  1.00  0.00
ATOM   1697  HG2 GLU   103       0.364   8.680   2.871  1.00  0.00
ATOM   1698  CD  GLU   103      -0.734  10.472   3.178  1.00  0.00
ATOM   1699  OE1 GLU   103      -1.856  10.996   3.342  1.00  0.00
ATOM   1700  OE2 GLU   103       0.337  11.108   3.264  1.00  0.00
ATOM   1701  C   GLU   103       0.439   7.858   5.478  1.00  0.00
ATOM   1702  O   GLU   103       1.644   7.658   5.334  1.00  0.00
ATOM   1703  N   LYS   104      -0.052   8.675   6.405  1.00  0.00
ATOM   1704  HN  LYS   104      -1.024   8.786   6.480  1.00  0.00
ATOM   1705  CA  LYS   104       0.821   9.417   7.306  1.00  0.00
ATOM   1706  HA  LYS   104       1.329  10.172   6.725  1.00  0.00
ATOM   1707  CB  LYS   104      -0.003  10.100   8.399  1.00  0.00
ATOM   1708  HB1 LYS   104      -0.949   9.589   8.492  1.00  0.00
ATOM   1709  HB2 LYS   104       0.530  10.024   9.335  1.00  0.00
ATOM   1710  CG  LYS   104      -0.278  11.569   8.125  1.00  0.00
ATOM   1711  HG1 LYS   104       0.635  12.128   8.261  1.00  0.00
ATOM   1712  HG2 LYS   104      -1.026  11.920   8.820  1.00  0.00
ATOM   1713  CD  LYS   104      -0.782  11.786   6.708  1.00  0.00
ATOM   1714  HD1 LYS   104      -0.960  10.824   6.248  1.00  0.00
ATOM   1715  HD2 LYS   104      -0.031  12.322   6.147  1.00  0.00
ATOM   1716  CE  LYS   104      -2.073  12.589   6.695  1.00  0.00
ATOM   1717  HE1 LYS   104      -2.601  12.384   5.775  1.00  0.00
ATOM   1718  HE2 LYS   104      -2.680  12.283   7.534  1.00  0.00
ATOM   1719  NZ  LYS   104      -1.817  14.053   6.791  1.00  0.00
ATOM   1720  HZ1 LYS   104      -2.239  14.433   7.661  1.00  0.00
ATOM   1721  HZ2 LYS   104      -2.233  14.543   5.973  1.00  0.00
ATOM   1722  HZ3 LYS   104      -0.793  14.236   6.806  1.00  0.00
ATOM   1723  C   LYS   104       1.860   8.497   7.941  1.00  0.00
ATOM   1724  O   LYS   104       2.995   8.903   8.184  1.00  0.00
ATOM   1725  N   PHE   105       1.460   7.259   8.213  1.00  0.00
ATOM   1726  HN  PHE   105       0.540   6.997   7.997  1.00  0.00
ATOM   1727  CA  PHE   105       2.351   6.279   8.824  1.00  0.00
ATOM   1728  HA  PHE   105       2.951   6.790   9.562  1.00  0.00
ATOM   1729  CB  PHE   105       1.536   5.184   9.515  1.00  0.00
ATOM   1730  HB1 PHE   105       2.007   4.228   9.338  1.00  0.00
ATOM   1731  HB2 PHE   105       0.540   5.171   9.097  1.00  0.00
ATOM   1732  CG  PHE   105       1.411   5.369  11.001  1.00  0.00
ATOM   1733  CD1 PHE   105       0.521   6.294  11.524  1.00  0.00
ATOM   1734  HD1 PHE   105      -0.083   6.887  10.853  1.00  0.00
ATOM   1735  CD2 PHE   105       2.177   4.614  11.874  1.00  0.00
ATOM   1736  HD2 PHE   105       2.872   3.889  11.478  1.00  0.00
ATOM   1737  CE1 PHE   105       0.400   6.465  12.890  1.00  0.00
ATOM   1738  HE1 PHE   105      -0.296   7.190  13.285  1.00  0.00
ATOM   1739  CE2 PHE   105       2.061   4.780  13.241  1.00  0.00
ATOM   1740  HE2 PHE   105       2.665   4.186  13.911  1.00  0.00
ATOM   1741  CZ  PHE   105       1.172   5.707  13.750  1.00  0.00
ATOM   1742  HZ  PHE   105       1.079   5.838  14.818  1.00  0.00
ATOM   1743  C   PHE   105       3.279   5.655   7.785  1.00  0.00
ATOM   1744  O   PHE   105       4.491   5.871   7.808  1.00  0.00
ATOM   1745  N   PHE   106       2.702   4.870   6.882  1.00  0.00
ATOM   1746  HN  PHE   106       1.732   4.732   6.922  1.00  0.00
ATOM   1747  CA  PHE   106       3.470   4.199   5.841  1.00  0.00
ATOM   1748  HA  PHE   106       4.078   3.441   6.316  1.00  0.00
ATOM   1749  CB  PHE   106       2.532   3.526   4.839  1.00  0.00
ATOM   1750  HB1 PHE   106       1.881   2.844   5.366  1.00  0.00
ATOM   1751  HB2 PHE   106       1.937   4.281   4.351  1.00  0.00
ATOM   1752  CG  PHE   106       3.254   2.755   3.777  1.00  0.00
ATOM   1753  CD1 PHE   106       3.931   1.590   4.091  1.00  0.00
ATOM   1754  HD1 PHE   106       3.928   1.235   5.109  1.00  0.00
ATOM   1755  CD2 PHE   106       3.267   3.202   2.469  1.00  0.00
ATOM   1756  HD2 PHE   106       2.743   4.111   2.214  1.00  0.00
ATOM   1757  CE1 PHE   106       4.601   0.879   3.118  1.00  0.00
ATOM   1758  HE1 PHE   106       5.122  -0.029   3.376  1.00  0.00
ATOM   1759  CE2 PHE   106       3.941   2.500   1.491  1.00  0.00
ATOM   1760  HE2 PHE   106       3.935   2.853   0.471  1.00  0.00
ATOM   1761  CZ  PHE   106       4.605   1.334   1.814  1.00  0.00
ATOM   1762  HZ  PHE   106       5.125   0.780   1.050  1.00  0.00
ATOM   1763  C   PHE   106       4.388   5.173   5.110  1.00  0.00
ATOM   1764  O   PHE   106       5.610   5.033   5.148  1.00  0.00
ATOM   1765  N   PHE   107       3.795   6.155   4.434  1.00  0.00
ATOM   1766  HN  PHE   107       2.814   6.212   4.432  1.00  0.00
ATOM   1767  CA  PHE   107       4.575   7.140   3.686  1.00  0.00
ATOM   1768  HA  PHE   107       5.076   6.616   2.885  1.00  0.00
ATOM   1769  CB  PHE   107       3.662   8.212   3.077  1.00  0.00
ATOM   1770  HB1 PHE   107       2.932   8.510   3.811  1.00  0.00
ATOM   1771  HB2 PHE   107       4.263   9.070   2.810  1.00  0.00
ATOM   1772  CG  PHE   107       2.918   7.770   1.838  1.00  0.00
ATOM   1773  CD1 PHE   107       3.038   6.475   1.348  1.00  0.00
ATOM   1774  HD1 PHE   107       3.674   5.771   1.863  1.00  0.00
ATOM   1775  CD2 PHE   107       2.098   8.660   1.160  1.00  0.00
ATOM   1776  HD2 PHE   107       1.995   9.670   1.528  1.00  0.00
ATOM   1777  CE1 PHE   107       2.356   6.080   0.214  1.00  0.00
ATOM   1778  HE1 PHE   107       2.460   5.069  -0.154  1.00  0.00
ATOM   1779  CE2 PHE   107       1.413   8.268   0.025  1.00  0.00
ATOM   1780  HE2 PHE   107       0.777   8.972  -0.492  1.00  0.00
ATOM   1781  CZ  PHE   107       1.542   6.977  -0.449  1.00  0.00
ATOM   1782  HZ  PHE   107       1.007   6.669  -1.336  1.00  0.00
ATOM   1783  C   PHE   107       5.636   7.787   4.571  1.00  0.00
ATOM   1784  O   PHE   107       6.638   8.301   4.075  1.00  0.00
ATOM   1785  N   SER   108       5.411   7.766   5.883  1.00  0.00
ATOM   1786  HN  SER   108       4.619   7.305   6.227  1.00  0.00
ATOM   1787  CA  SER   108       6.391   8.287   6.826  1.00  0.00
ATOM   1788  HA  SER   108       6.835   9.173   6.400  1.00  0.00
ATOM   1789  CB  SER   108       5.730   8.643   8.157  1.00  0.00
ATOM   1790  HB1 SER   108       6.468   8.597   8.942  1.00  0.00
ATOM   1791  HB2 SER   108       4.940   7.938   8.364  1.00  0.00
ATOM   1792  OG  SER   108       5.181   9.949   8.121  1.00  0.00
ATOM   1793  HG  SER   108       4.501   9.993   7.445  1.00  0.00
ATOM   1794  C   SER   108       7.471   7.243   7.042  1.00  0.00
ATOM   1795  O   SER   108       8.647   7.561   7.216  1.00  0.00
ATOM   1796  N   LYS   109       7.049   5.986   6.994  1.00  0.00
ATOM   1797  HN  LYS   109       6.100   5.811   6.828  1.00  0.00
ATOM   1798  CA  LYS   109       7.953   4.860   7.124  1.00  0.00
ATOM   1799  HA  LYS   109       8.620   5.053   7.951  1.00  0.00
ATOM   1800  CB  LYS   109       7.149   3.591   7.401  1.00  0.00
ATOM   1801  HB1 LYS   109       6.255   3.607   6.795  1.00  0.00
ATOM   1802  HB2 LYS   109       7.741   2.737   7.126  1.00  0.00
ATOM   1803  CG  LYS   109       6.734   3.440   8.856  1.00  0.00
ATOM   1804  HG1 LYS   109       5.820   2.866   8.902  1.00  0.00
ATOM   1805  HG2 LYS   109       6.566   4.421   9.276  1.00  0.00
ATOM   1806  CD  LYS   109       7.802   2.732   9.670  1.00  0.00
ATOM   1807  HD1 LYS   109       8.751   3.219   9.500  1.00  0.00
ATOM   1808  HD2 LYS   109       7.544   2.794  10.717  1.00  0.00
ATOM   1809  CE  LYS   109       7.919   1.269   9.276  1.00  0.00
ATOM   1810  HE1 LYS   109       6.930   0.835   9.254  1.00  0.00
ATOM   1811  HE2 LYS   109       8.359   1.209   8.292  1.00  0.00
ATOM   1812  NZ  LYS   109       8.763   0.502  10.233  1.00  0.00
ATOM   1813  HZ1 LYS   109       8.800  -0.499   9.955  1.00  0.00
ATOM   1814  HZ2 LYS   109       8.368   0.570  11.192  1.00  0.00
ATOM   1815  HZ3 LYS   109       9.731   0.883  10.241  1.00  0.00
ATOM   1816  C   LYS   109       8.769   4.700   5.846  1.00  0.00
ATOM   1817  O   LYS   109       9.948   4.348   5.882  1.00  0.00
ATOM   1818  N   ILE   110       8.127   4.989   4.717  1.00  0.00
ATOM   1819  HN  ILE   110       7.193   5.283   4.765  1.00  0.00
ATOM   1820  CA  ILE   110       8.780   4.928   3.416  1.00  0.00
ATOM   1821  HA  ILE   110       8.993   3.891   3.187  1.00  0.00
ATOM   1822  CB  ILE   110       7.850   5.488   2.313  1.00  0.00
ATOM   1823  HB  ILE   110       7.508   6.464   2.626  1.00  0.00
ATOM   1824  CG1 ILE   110       6.640   4.570   2.129  1.00  0.00
ATOM   1825 HG11 ILE   110       5.898   5.077   1.532  1.00  0.00
ATOM   1826 HG12 ILE   110       6.221   4.342   3.093  1.00  0.00
ATOM   1827  CG2 ILE   110       8.593   5.651   0.996  1.00  0.00
ATOM   1828 HG21 ILE   110       8.729   6.702   0.786  1.00  0.00
ATOM   1829 HG22 ILE   110       8.022   5.196   0.201  1.00  0.00
ATOM   1830 HG23 ILE   110       9.556   5.169   1.070  1.00  0.00
ATOM   1831  CD1 ILE   110       6.973   3.260   1.449  1.00  0.00
ATOM   1832 HD11 ILE   110       6.748   2.442   2.117  1.00  0.00
ATOM   1833 HD12 ILE   110       8.023   3.242   1.201  1.00  0.00
ATOM   1834 HD13 ILE   110       6.388   3.162   0.548  1.00  0.00
ATOM   1835  C   ILE   110      10.088   5.717   3.438  1.00  0.00
ATOM   1836  O   ILE   110      11.129   5.225   3.008  1.00  0.00
ATOM   1837  N   LYS   111      10.018   6.946   3.946  1.00  0.00
ATOM   1838  HN  LYS   111       9.153   7.278   4.263  1.00  0.00
ATOM   1839  CA  LYS   111      11.184   7.828   4.017  1.00  0.00
ATOM   1840  HA  LYS   111      11.336   8.250   3.035  1.00  0.00
ATOM   1841  CB  LYS   111      10.921   8.963   5.009  1.00  0.00
ATOM   1842  HB1 LYS   111      11.572   8.840   5.861  1.00  0.00
ATOM   1843  HB2 LYS   111       9.894   8.907   5.340  1.00  0.00
ATOM   1844  CG  LYS   111      11.156  10.346   4.425  1.00  0.00
ATOM   1845  HG1 LYS   111      11.692  10.245   3.493  1.00  0.00
ATOM   1846  HG2 LYS   111      11.746  10.925   5.121  1.00  0.00
ATOM   1847  CD  LYS   111       9.847  11.073   4.164  1.00  0.00
ATOM   1848  HD1 LYS   111      10.065  12.076   3.827  1.00  0.00
ATOM   1849  HD2 LYS   111       9.280  11.114   5.083  1.00  0.00
ATOM   1850  CE  LYS   111       9.018  10.367   3.104  1.00  0.00
ATOM   1851  HE1 LYS   111       8.683   9.419   3.499  1.00  0.00
ATOM   1852  HE2 LYS   111       9.636  10.195   2.235  1.00  0.00
ATOM   1853  NZ  LYS   111       7.830  11.169   2.702  1.00  0.00
ATOM   1854  HZ1 LYS   111       7.360  11.560   3.543  1.00  0.00
ATOM   1855  HZ2 LYS   111       7.151  10.571   2.187  1.00  0.00
ATOM   1856  HZ3 LYS   111       8.121  11.954   2.084  1.00  0.00
ATOM   1857  C   LYS   111      12.448   7.070   4.425  1.00  0.00
ATOM   1858  O   LYS   111      13.491   7.199   3.785  1.00  0.00
ATOM   1859  N   GLU   112      12.347   6.285   5.491  1.00  0.00
ATOM   1860  HN  GLU   112      11.489   6.225   5.962  1.00  0.00
ATOM   1861  CA  GLU   112      13.485   5.516   5.983  1.00  0.00
ATOM   1862  HA  GLU   112      14.297   6.205   6.161  1.00  0.00
ATOM   1863  CB  GLU   112      13.126   4.819   7.296  1.00  0.00
ATOM   1864  HB1 GLU   112      12.159   4.350   7.189  1.00  0.00
ATOM   1865  HB2 GLU   112      13.864   4.058   7.500  1.00  0.00
ATOM   1866  CG  GLU   112      13.070   5.760   8.489  1.00  0.00
ATOM   1867  HG1 GLU   112      12.440   5.320   9.249  1.00  0.00
ATOM   1868  HG2 GLU   112      12.644   6.700   8.169  1.00  0.00
ATOM   1869  CD  GLU   112      14.437   6.026   9.087  1.00  0.00
ATOM   1870  OE1 GLU   112      14.842   5.277  10.001  1.00  0.00
ATOM   1871  OE2 GLU   112      15.103   6.984   8.641  1.00  0.00
ATOM   1872  C   GLU   112      13.934   4.484   4.954  1.00  0.00
ATOM   1873  O   GLU   112      15.128   4.228   4.798  1.00  0.00
ATOM   1874  N   ALA   113      12.970   3.892   4.257  1.00  0.00
ATOM   1875  HN  ALA   113      12.037   4.138   4.430  1.00  0.00
ATOM   1876  CA  ALA   113      13.263   2.883   3.245  1.00  0.00
ATOM   1877  HA  ALA   113      14.151   2.356   3.550  1.00  0.00
ATOM   1878  CB  ALA   113      12.128   1.872   3.167  1.00  0.00
ATOM   1879  HB1 ALA   113      11.209   2.380   2.915  1.00  0.00
ATOM   1880  HB2 ALA   113      12.018   1.381   4.123  1.00  0.00
ATOM   1881  HB3 ALA   113      12.353   1.136   2.409  1.00  0.00
ATOM   1882  C   ALA   113      13.513   3.512   1.873  1.00  0.00
ATOM   1883  O   ALA   113      13.917   2.823   0.936  1.00  0.00
ATOM   1884  N   GLY   114      13.276   4.818   1.753  1.00  0.00
ATOM   1885  HN  GLY   114      12.946   5.324   2.523  1.00  0.00
ATOM   1886  CA  GLY   114      13.468   5.488   0.480  1.00  0.00
ATOM   1887  HA1 GLY   114      14.518   5.464   0.226  1.00  0.00
ATOM   1888  HA2 GLY   114      13.152   6.516   0.573  1.00  0.00
ATOM   1889  C   GLY   114      12.679   4.830  -0.634  1.00  0.00
ATOM   1890  O   GLY   114      13.227   4.056  -1.417  1.00  0.00
ATOM   1891  N   LEU   115      11.383   5.123  -0.690  1.00  0.00
ATOM   1892  HN  LEU   115      11.006   5.743  -0.033  1.00  0.00
ATOM   1893  CA  LEU   115      10.508   4.534  -1.697  1.00  0.00
ATOM   1894  HA  LEU   115      11.123   4.180  -2.510  1.00  0.00
ATOM   1895  CB  LEU   115       9.724   3.363  -1.104  1.00  0.00
ATOM   1896  HB1 LEU   115       9.340   3.668  -0.144  1.00  0.00
ATOM   1897  HB2 LEU   115       8.890   3.167  -1.754  1.00  0.00
ATOM   1898  CG  LEU   115      10.497   2.058  -0.907  1.00  0.00
ATOM   1899  HG  LEU   115       9.793   1.246  -0.833  1.00  0.00
ATOM   1900  CD1 LEU   115      11.280   2.102   0.391  1.00  0.00
ATOM   1901 HD11 LEU   115      10.719   1.597   1.166  1.00  0.00
ATOM   1902 HD12 LEU   115      11.440   3.130   0.676  1.00  0.00
ATOM   1903 HD13 LEU   115      12.231   1.611   0.255  1.00  0.00
ATOM   1904  CD2 LEU   115      11.414   1.774  -2.087  1.00  0.00
ATOM   1905 HD21 LEU   115      11.066   2.313  -2.953  1.00  0.00
ATOM   1906 HD22 LEU   115      11.409   0.715  -2.298  1.00  0.00
ATOM   1907 HD23 LEU   115      12.418   2.086  -1.846  1.00  0.00
ATOM   1908  C   LEU   115       9.509   5.550  -2.237  1.00  0.00
ATOM   1909  O   LEU   115       9.388   6.653  -1.709  1.00  0.00
ATOM   1910  N   ILE   116       8.752   5.124  -3.252  1.00  0.00
ATOM   1911  HN  ILE   116       8.896   4.217  -3.594  1.00  0.00
ATOM   1912  CA  ILE   116       7.707   5.945  -3.865  1.00  0.00
ATOM   1913  HA  ILE   116       7.395   5.441  -4.768  1.00  0.00
ATOM   1914  CB  ILE   116       6.469   6.061  -2.949  1.00  0.00
ATOM   1915  HB  ILE   116       6.730   6.669  -2.097  1.00  0.00
ATOM   1916 CG1 ILE   116       6.037   4.676  -2.458  1.00  0.00
ATOM   1917 HG11 ILE   116       5.298   4.265  -3.135  1.00  0.00
ATOM   1918 HG12 ILE   116       6.898   4.026  -2.435  1.00  0.00
ATOM   1919 CG2 ILE   116       5.326   6.743  -3.681  1.00  0.00
ATOM   1920 HG21 ILE   116       5.006   7.609  -3.121  1.00  0.00
ATOM   1921 HG22 ILE   116       4.502   6.052  -3.779  1.00  0.00
ATOM   1922 HG23 ILE   116       5.659   7.050  -4.661  1.00  0.00
ATOM   1923  CD1 ILE   116       5.433   4.694  -1.073  1.00  0.00
ATOM   1924 HD11 ILE   116       6.172   5.032  -0.363  1.00  0.00
ATOM   1925 HD12 ILE   116       5.110   3.698  -0.809  1.00  0.00
ATOM   1926 HD13 ILE   116       4.586   5.363  -1.057  1.00  0.00
ATOM   1927  C   ILE   116       8.213   7.340  -4.246  1.00  0.00
ATOM   1928  O   ILE   116       8.498   7.601  -5.415  1.00  0.00
ATOM   1929  N   ASP   117       8.305   8.240  -3.268  1.00  0.00
ATOM   1930  HN  ASP   117       8.072   7.979  -2.355  1.00  0.00
ATOM   1931  CA  ASP   117       8.776   9.600  -3.515  1.00  0.00
ATOM   1932  HA  ASP   117       8.982  10.054  -2.558  1.00  0.00
ATOM   1933  CB  ASP   117      10.063   9.583  -4.345  1.00  0.00
ATOM   1934  HB1 ASP   117       9.902  10.133  -5.260  1.00  0.00
ATOM   1935  HB2 ASP   117      10.317   8.560  -4.583  1.00  0.00
ATOM   1936  CG  ASP   117      11.233  10.208  -3.610  1.00  0.00
ATOM   1937  OD1 ASP   117      11.577  11.368  -3.920  1.00  0.00
ATOM   1938  OD2 ASP   117      11.804   9.538  -2.724  1.00  0.00
ATOM   1939  C   ASP   117       7.708  10.424  -4.226  1.00  0.00
ATOM   1940  O   ASP   117       8.020  11.293  -5.041  1.00  0.00
ATOM   1941  N   LYS   118       6.448  10.150  -3.906  1.00  0.00
ATOM   1942  HN  LYS   118       6.264   9.447  -3.247  1.00  0.00
ATOM   1943  CA  LYS   118       5.332  10.869  -4.508  1.00  0.00
ATOM   1944  HA  LYS   118       5.635  11.184  -5.496  1.00  0.00
ATOM   1945  CB  LYS   118       4.114   9.952  -4.628  1.00  0.00
ATOM   1946  HB1 LYS   118       3.696   9.798  -3.644  1.00  0.00
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ATOM   1947  HB2 LYS   118       4.432   9.001  -5.028  1.00  0.00
ATOM   1948  CG  LYS   118       3.021  10.506  -5.527  1.00  0.00
ATOM   1949  HG1 LYS   118       3.175  10.140  -6.531  1.00  0.00
ATOM   1950  HG2 LYS   118       3.077  11.585  -5.522  1.00  0.00
ATOM   1951  CD  LYS   118       1.642  10.081  -5.053  1.00  0.00
ATOM   1952  HD1 LYS   118       1.422   9.100  -5.449  1.00  0.00
ATOM   1953  HD2 LYS   118       1.637  10.044  -3.974  1.00  0.00
ATOM   1954  CE  LYS   118       0.569  11.052  -5.518  1.00  0.00
ATOM   1955  HE1 LYS   118      -0.025  11.347  -4.666  1.00  0.00
ATOM   1956  HE2 LYS   118       1.048  11.922  -5.942  1.00  0.00
ATOM   1957  NZ  LYS   118      -0.324  10.443  -6.543  1.00  0.00
ATOM   1958  HZ1 LYS   118      -0.734   9.558  -6.180  1.00  0.00
ATOM   1959  HZ2 LYS   118       0.214  10.234  -7.408  1.00  0.00
ATOM   1960  HZ3 LYS   118      -1.097  11.099  -6.778  1.00  0.00
ATOM   1961  C   LYS   118       4.974  12.103  -3.687  1.00  0.00
ATOM   1962  OT1 LYS   118       4.769  13.177  -4.291  1.00  0.00
ATOM   1963  OT2 LYS   118       4.901  11.986  -2.445  1.00  0.00
END
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REPLACEMENT SHEET

Table 6

Atomic Structure Coordinates of the P/CAF Bromodomain/Acetyl-Histamine Complex

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REMARK
FILENAME="/bloch2/chris/COMPLEX_XPLOR_ARIA7/structures/it8/complex_83.*REMARK
initial random number seed: 5.960359E+10REMARK
=============================================================REMARK
overall,bonds,angles,improper,vdw,noe,cdihREMARK energies: 154.107, 9.85626,
72.1621, 0, 22.2303, 36.0151, 0.204524REMARK
=============================================================REMARK
bonds,angles,impropers,noe,cdihREMARK rms-dev.: 2.214961E-
03,0.361077,52.7899,1.40651E-02,0.249335REMARK
=============================================================REMARK
noe.  cdihREMARK violations.: 2, 0REMARK
=============================================================REMARK DATE:05-
Dec-98  15:11:47       created by user:ATOM      1  CA  ACE   200      -14.038
2.661  -4.705  1.00  0.00      AcH ATOM      2  HA1 ACE   200      -14.803
1.912  -4.558  1.00  0.00      AcH ATOM      3  HA2 ACE   200      -13.320
2.304  -5.428  1.00  0.00      AcH ATOM      4  HA3 ACE   200      -14.491
3.572  -5.067  1.00  0.00      AcH ATOM      5  C   ACE   200      -13.332
2.936  -3.376  1.00  0.00      AcH ATOM      6  O   ACE   200      -12.385
2.238  -3.012  1.00  0.00      AcH ATOM      7  N   HIM   201      -13.773
3.967  -2.663  1.00  0.00      AcH ATOM      8  HN  HIM   201      -13.586
4.875  -2.982  1.00  0.00      AcH ATOM      9  CA  HIM   201      -14.521
3.827  -1.417  1.00  0.00      AcH ATOM     10  HA1 HIM   201      -13.833
3.589  -0.620  1.00  0.00      AcH ATOM     11  HA2 HIM   201      -15.236
3.025  -1.526  1.00  0.00      AcH ATOM     12  CB  HIM   201      -15.268
5.100  -1.055  1.00  0.00      AcH ATOM     13  HB1 HIM   201      -14.591
5.940  -1.107  1.00  0.00      AcH ATOM     14  HB2 HIM   201      -15.669
5.009  -0.056  1.00  0.00      AcH ATOM     15  CG  HIM   201      -16.397
5.329  -2.010  1.00  0.00      AcH ATOM     16  ND1 HIM   201      -17.392
6.259  -1.793  1.00  0.00      AcH ATOM     17  HD1 HIM   201      -17.421
6.906  -1.057  1.00  0.00      AcH ATOM     18  CD2 HIM   201      -16.680
4.756  -3.204  1.00  0.00      AcH ATOM     19  HD2 HIM   201      -16.026
4.116  -3.779  1.00  0.00      AcH ATOM     20  CE1 HIM   201      -18.316
6.135  -2.729  1.00  0.00      AcH ATOM     21  HE1 HIM   201      -19.220
6.722  -2.806  1.00  0.00      AcH ATOM     22  NE2 HIM   201      -17.912
5.221  -3.592  1.00  0.00      AcH ATOM     23  CA  GLY     1       27.272
16.667  -0.366  1.00  0.00      BrD ATOM     24  HA1 GLY     1       28.103
16.198  -0.871  1.00  0.00      BrD ATOM     25  HA2 GLY     1       26.478
15.945  -0.255  1.00  0.00      BrD ATOM     26  C   GLY     1       27.724
17.114   1.011  1.00  0.00      BrD ATOM     27  O   GLY     1       28.713
17.834   1.144  1.00  0.00      BrD ATOM     28  N   GLY     1       26.780
17.800  -1.198  1.00  0.00      BrD ATOM     29  HT1 GLY     1       25.769
17.963  -1.018  1.00  0.00      BrD ATOM     30  HT2 GLY     1       26.911
17.584  -2.207  1.00  0.00      BrD ATOM     31  HT3 GLY     1       27.307
18.667  -0.970  1.00  0.00      BrD ATOM     32  N   SER     2       26.999
16.682   2.037  1.00  0.00      BrD ATOM     33  HN  SER     2       26.222
16.110   1.866  1.00  0.00      BrD ATOM     34  CA  SER     2       27.328
17.043   3.411  1.00  0.00      BrD ATOM     35  HA  SER     2       28.283
17.546   3.401  1.00  0.00      BrD ATOM     36  CB  SER     2       26.269
17.992   3.975  1.00  0.00      BrD ATOM     37  HB1 SER     2       26.705
18.588   4.762  1.00  0.00      BrD ATOM     38  HB2 SER     2       25.448
17.414   4.374  1.00  0.00      BrD ATOM     39  OG  SER     2       25.771
18.857   2.969  1.00  0.00      BrD ATOM     40  HG  SER     2       26.478
19.429   2.660  1.00  0.00      BrD ATOM     41  C   SER     2       27.435
15.801   4.290  1.00  0.00      BrD ATOM     42  O   SER     2       26.900
14.744   3.956  1.00  0.00      BrD ATOM     43  N   HIS     3       28.131
15.936   5.415  1.00  0.00      BrD ATOM     44  HN  HIS     3       28.534
16.803   5.627  1.00  0.00      BrD ATOM     45  CA  HIS     3       28.308
14.824   6.342  1.00  0.00      BrD ATOM     46  HA  HIS     3       28.652
13.972   5.775  1.00  0.00      BrD ATOM     47  CB  HIS     3       29.356
15.176   7.399  1.00  0.00      BrD ATOM     48  HB1 HIS     3       29.337
14.428   8.178  1.00  0.00      BrD ATOM     49  HB2 HIS     3       30.333
15.184   6.939  1.00  0.00      BrD ATOM     50  CG  HIS     3       29.137
16.512   8.039  1.00  0.00      BrD ATOM     51  ND1 HIS     3       28.235
16.718   9.062  1.00  0.00      BrD ATOM     52  HD1 HIS     3       27.659
16.035   9.465  1.00  0.00      BrD ATOM     53  CD2 HIS     3       29.710
17.715   7.796  1.00  0.00      BrD ATOM     54  HD2 HIS     3       30.468
17.927   7.055  1.00  0.00      BrD ATOM     55  CE1 HIS     3       28.262
17.991   9.420  1.00  0.00      BrD ATOM     56  HE1 HIS     3       27.661
18.442  10.196  1.00  0.00      BrD ATOM     57  NE2 HIS     3       29.148
18.615   8.668  1.00  0.00      BrD ATOM     58  HE2 HIS     3       29.368
19.568   8.725  1.00  0.00      BrD ATOM     59  C   HIS     3       26.991
14.463   7.020  1.00  0.00      BrD ATOM     60  O   HIS     3       26.660
14.998   8.078  1.00  0.00      BrD ATOM     61  N   MET     4       26.245
13.551   6.405  1.00  0.00      BrD ATOM     62  HN  MET     4       26.563
13.161   5.565  1.00  0.00      BrD ATOM     63  CA  MET     4       24.964
13.119   6.951  1.00  0.00      BrD ATOM     64  HA  MET     4       25.136
12.767   7.958  1.00  0.00      BrD ATOM     65  CB  MET     4       23.985
14.294   6.994  1.00  0.00      BrD ATOM     66  HB1 MET     4       24.445
15.111   7.531  1.00  0.00      BrD ATOM     67  HB2 MET     4       23.776
14.612   5.984  1.00  0.00      BrD ATOM     68  CG  MET     4       22.665
13.962   7.672  1.00  0.00      BrD ATOM     69  HG1 MET     4       22.754
14.176   8.727  1.00  0.00      BrD ATOM     70  HG2 MET     4       22.461
12.911   7.535  1.00  0.00      BrD ATOM     71  SD  MET     4       21.283
14.909   7.006  1.00  0.00      BrD ATOM     72  CE  MET     4       22.027
16.531   6.842  1.00  0.00      BrD ATOM     73  HE1 MET     4       22.811
16.643   7.576  1.00  0.00      BrD ATOM     74  HE2 MET     4       21.274
17.289   7.000  1.00  0.00      BrD ATOM     75  HE3 MET     4       22.443
16.638   5.851  1.00  0.00      BrD ATOM     76  C   MET     4       24.376
11.977   6.126  1.00  0.00      BrD ATOM     77  O   MET     4       24.580
11.906   4.914  1.00  0.00      BrD ATOM     78  N   SER     5       23.650
11.084   6.792  1.00  0.00      BrD ATOM     79  HN  SER     5       23.528
11.194   7.758  1.00  0.00      BrD ATOM     80  CA  SER     5       23.040
9.939   6.125  1.00  0.00      BrD ATOM     81  HA  SER     5       23.836
9.303   5.767  1.00  0.00      BrD ATOM     82  CB  SER     5       22.177
9.148   7.111  1.00  0.00      BrD ATOM     83  HB1 SER     5       21.179
9.560   7.123  1.00  0.00      BrD ATOM     84  HB2 SER     5       22.136
8.114   6.801  1.00  0.00      BrD ATOM     85  OG  SER     5       22.712
9.210   8.421  1.00  0.00      BrD ATOM     86  HG  SER     5       23.243
8.428   8.588  1.00  0.00      BrD ATOM     87  C   SER     5       22.194
10.380   4.934  1.00  0.00      BrD ATOM     88  O   SER     5       21.748
11.525   4.867  1.00  0.00      BrD ATOM     89  N   LYS     6       21.973
9.460   3.999  1.00  0.00      BrD ATOM     90  HN  LYS     6       22.355
8.565   4.110  1.00  0.00      BrD ATOM     91  CA  LYS     6       21.180
9.753   2.811  1.00  0.00      BrD ATOM     92  HA  LYS     6       20.720
10.720   2.950  1.00  0.00      BrD ATOM     93  CB  LYS     6       22.078
9.801   1.572  1.00  0.00      BrD ATOM     94  HB1 LYS     6       21.474
10.056   0.714  1.00  0.00      BrD ATOM     95  HB2 LYS     6       22.512
8.824   1.418  1.00  0.00      BrD ATOM     96  CG  LYS     6       23.208
10.813   1.677  1.00  0.00      BrD ATOM     97  HG1 LYS     6       23.164
11.290   2.645  1.00  0.00      BrD ATOM     98  HG2 LYS     6       24.151
10.299   1.568  1.00  0.00      BrD ATOM     99  CD  LYS     6       23.100
11.879   0.598  1.00  0.00      BrD ATOM    100  HD1 LYS     6       22.401
11.546  -0.155  1.00  0.00      BrD ATOM    101  HD2 LYS     6       24.072
12.024   0.150  1.00  0.00      BrD ATOM    102  CE  LYS     6       22.618
13.203   1.168  1.00  0.00      BrD ATOM    103  HE1 LYS     6       21.595
13.088   1.494  1.00  0.00      BrD ATOM    104  HE2 LYS     6       22.666
13.953   0.393  1.00  0.00      BrD ATOM    105  NZ  LYS     6       23.448
13.645   2.322  1.00  0.00      BrD ATOM    106  HZ1 LYS     6       24.293
13.045   2.406  1.00  0.00      BrD ATOM    107  HZ2 LYS     6       22.900
13.578   3.204  1.00  0.00      BrD ATOM    108  HZ3 LYS     6       23.749
14.632   2.189  1.00  0.00      BrD ATOM    109  C   LYS     6       20.085
8.710   2.613  1.00  0.00      BrD ATOM    110  O   LYS     6       18.897
9.022   2.693  1.00  0.00      BrD ATOM    111  N   GLU     7       20.495
7.474   2.334  1.00  0.00      BrD ATOM    112  HN  GLU     7       21.457
7.295   2.280  1.00  0.00      BrD ATOM    113  CA  GLU     7       19.558
6.370   2.115  1.00  0.00      BrD ATOM    114  HA  GLU     7       20.083
5.603   1.565  1.00  0.00      BrD ATOM    115  CB  GLU     7       19.091
5.783   3.451  1.00  0.00      BrD ATOM    116  HB1 GLU     7       18.110
5.354   3.317  1.00  0.00      BrD ATOM    117  HB2 GLU     7       19.777
5.003   3.745  1.00  0.00      BrD ATOM    118  CG  GLU     7       19.014
6.799   4.579  1.00  0.00      BrD ATOM    119  HG1 GLU     7       18.377
7.614   4.271  1.00  0.00      BrD ATOM    120  HG2 GLU     7       20.007
7.173   4.780  1.00  0.00      BrD ATOM    121  CD  GLU     7       18.452
6.206   5.857  1.00  0.00      BrD ATOM    122  OE1 GLU     7       17.289
6.511   6.192  1.00  0.00      BrD ATOM    123  OE2 GLU     7       19.176
5.434   6.521  1.00  0.00      BrD ATOM    124  C   GLU     7       18.347
6.812   1.290  1.00  0.00      BrD ATOM    125  O   GLU     7       17.342
7.261   1.840  1.00  0.00      BrD ATOM    126  N   PRO     8       18.430
6.681  -0.045  1.00  0.00      BrD ATOM    127  CA  PRO     8       17.346
7.054  -0.951  1.00  0.00      BrD ATOM    128  HA  PRO     8       16.908
8.003  -0.677  1.00  0.00      BrD ATOM    129  CB  PRO     8       18.034
7.176  -2.321  1.00  0.00      BrD ATOM    130  HB1 PRO     8       17.603
6.458  -3.004  1.00  0.00      BrD ATOM    131  HB2 PRO     8       17.887
8.174  -2.708  1.00  0.00      BrD ATOM    132  CG  PRO     8       19.488
6.895  -2.087  1.00  0.00      BrD ATOM    133  HG1 PRO     8       19.876
6.286  -2.890  1.00  0.00      BrD ATOM    134  HG2 PRO     8       20.034
7.825  -2.026  1.00  0.00      BrD ATOM    135  CD  PRO     8       19.578
6.155  -0.784  1.00  0.00      BrD ATOM    136  HD1 PRO     8       20.504
6.384  -0.278  1.00  0.00      BrD ATOM    137  HD2 PRO     8       19.481
5.090  -0.943  1.00  0.00      BrD ATOM    138  C   PRO     8       16.259
5.987  -1.000  1.00  0.00      BrD ATOM    139  O   PRO     8       15.071
6.286  -0.874  1.00  0.00      BrD ATOM    140  N   ARG     9       16.680
4.740  -1.177  1.00  0.00      BrD ATOM    141  HN  ARG     9       17.640
4.570  -1.269  1.00  0.00      BrD ATOM    142  CA  ARG     9       15.754
3.617  -1.241  1.00  0.00      BrD ATOM    143  HA  ARG     9       15.272
3.529  -0.279  1.00  0.00      BrD ATOM    144  CB  ARG     9       14.692
3.864  -2.314  1.00  0.00      BrD ATOM    145  HB1 ARG     9       14.073
2.982  -2.402  1.00  0.00      BrD ATOM    146  HB2 ARG     9       14.076
4.696  -2.010  1.00  0.00      BrD ATOM    147  CG  ARG     9       15.272
4.176  -3.684  1.00  0.00      BrD ATOM    148  HG1 ARG     9       16.153
3.571  -3.837  1.00  0.00      BrD ATOM    149  HG2 ARG     9       15.539
5.221  -3.721  1.00  0.00      BrD ATOM    150  CD  ARG     9       14.274
3.882  -4.793  1.00  0.00      BrD ATOM    151  HD1 ARG     9       13.277
4.055  -4.417  1.00  0.00      BrD ATOM    152  HD2 ARG     9       14.375
2.848  -5.085  1.00  0.00      BrD ATOM    153  NE  ARG     9       14.493
4.728  -5.963  1.00  0.00      BrD ATOM    154  HE  ARG     9       14.761
4.289  -6.797  1.00  0.00      BrD ATOM    155  CZ  ARG     9       14.350
6.049  -5.955  1.00  0.00      BrD ATOM    156  NH1 ARG     9       13.988
6.672  -4.842  1.00  0.00      BrD ATOM    157 HH11 ARG     9       13.823
6.147  -4.006  1.00  0.00      BrD ATOM    158 HH12 ARG     9       13.880
7.666  -4.837  1.00  0.00      BrD ATOM    159  NH2 ARG     9       14.567
6.749  -7.059  1.00  0.00      BrD ATOM    160 HH21 ARG     9       14.458
7.744  -7.051  1.00  0.00      BrD ATOM    161 HH22 ARG     9       14.840
6.284  -7.901  1.00  0.00      BrD ATOM    162  C   ARG     9       16.500
2.320  -1.538  1.00  0.00      BrD ATOM    163  O   ARG     9       17.367
2.278  -2.410  1.00  0.00      BrD ATOM    164  N   ASP    10       16.159
1.267  -0.803  1.00  0.00      BrD ATOM    165  HN  ASP    10       15.462
1.367  -0.123  1.00  0.00      BrD ATOM    166  CA  ASP    10       16.788  -
0.038  -0.988  1.00  0.00      BrD ATOM    167  HA  ASP    10       17.625
0.088  -1.658  1.00  0.00      BrD ATOM    168  CB  ASP    10       17.296  -
0.576   0.350  1.00  0.00      BrD ATOM    169  HB1 ASP    10       18.082
0.067   0.715  1.00  0.00      BrD ATOM    170  HB2 ASP    10       17.688  -
1.572   0.204  1.00  0.00      BrD ATOM    171  CG  ASP    10       16.203  -
0.641   1.399  1.00  0.00      BrD ATOM    172  OD1 ASP    10       16.210  -
1.595   2.205  1.00  0.00      BrD ATOM    173  OD2 ASP    10       15.340
0.262   1.413  1.00  0.00      BrD ATOM    174  C   ASP    10       15.803  -
1.028  -1.606  1.00  0.00      BrD ATOM    175  O   ASP    10       14.986  -
1.622  -0.903  1.00  0.00      BrD ATOM    176  N   PRO    11       15.866  -
1.218  -2.936  1.00  0.00      BrD ATOM    177  CA  PRO    11       14.974  -
2.118  -3.657  1.00  0.00      BrD ATOM    178  HA  PRO    11       13.975  -
2.098  -3.247  1.00  0.00      BrD ATOM    179  CB  PRO    11       14.958  -
1.540  -5.084  1.00  0.00      BrD ATOM    180  HB1 PRO    11       13.973  -
1.156  -5.302  1.00  0.00      BrD ATOM    181  HB2 PRO    11       15.203  -
2.321  -5.789  1.00  0.00      BrD ATOM    182  CG  PRO    11       15.982  -
0.443  -5.113  1.00  0.00      BrD ATOM    183  HG1 PRO    11       15.487
0.516  -5.149  1.00  0.00      BrD ATOM    184  HG2 PRO    11       16.620  -
0.564  -5.976  1.00  0.00      BrD ATOM    185  CD  PRO    11       16.792  -
0.558  -3.852  1.00  0.00      BrD ATOM    186  HD1 PRO    11       17.066
0.418  -3.487  1.00  0.00      BrD ATOM    187  HD2 PRO    11       17.671  -
1.163  -4.018  1.00  0.00      BrD ATOM    188  C   PRO    11       15.488  -
3.554  -3.670  1.00  0.00      BrD ATOM    189  O   PRO    11       15.551  -
4.191  -4.721  1.00  0.00      BrD ATOM    190  N   ASP    12       15.849  -
4.061  -2.496  1.00  0.00      BrD ATOM    191  HN  ASP    12       15.780  -
3.506  -1.691  1.00  0.00      BrD ATOM    192  CA  ASP    12       16.361  -
5.421  -2.384  1.00  0.00      BrD ATOM    193  HA  ASP    12       16.155  -
5.927  -3.315  1.00  0.00      BrD ATOM    194  CB  ASP    12       17.873  -
5.399  -2.151  1.00  0.00      BrD ATOM    195  HB1 ASP    12       18.123  -
6.112  -1.380  1.00  0.00      BrD ATOM    196  HB2 ASP    12       18.167  -
4.410  -1.830  1.00  0.00      BrD ATOM    197  CG  ASP    12       18.657  -
5.749  -3.400  1.00  0.00      BrD ATOM    198  OD1 ASP    12       18.450  -
5.084  -4.437  1.00  0.00      BrD ATOM    199  OD2 ASP    12       19.478  -
6.687  -3.342  1.00  0.00      BrD ATOM    200  C   ASP    12       15.674  -
6.179  -1.253  1.00  0.00      BrD ATOM    201  O   ASP    12       15.106  -
7.250  -1.468  1.00  0.00      BrD ATOM    202  N   GLN    13       15.740  -
5.626  -0.047  1.00  0.00      BrD ATOM    203  HN  GLN    13       16.206  -
4.770   0.063  1.00  0.00      BrD ATOM    204  CA  GLN    13       15.122  -
6.258   1.113  1.00  0.00      BrD ATOM    205  HA  GLN    13       15.336  -
7.316   1.069  1.00  0.00      BrD ATOM    206  CB  GLN    13       15.701  -
5.684   2.405  1.00  0.00      BrD ATOM    207  HB1 GLN    13       16.666  -
5.251   2.193  1.00  0.00      BrD ATOM    208  HB2 GLN    13       15.041  -
4.910   2.768  1.00  0.00      BrD ATOM    209  CG  GLN    13       15.870  -
6.719   3.505  1.00  0.00      BrD ATOM    210  HG1 GLN    13       15.520  -
6.297   4.436  1.00  0.00      BrD ATOM    211  HG2 GLN    13       15.277  -
7.587   3.258  1.00  0.00      BrD ATOM    212  CD  GLN    13       17.313  -
7.150   3.683  1.00  0.00      BrD ATOM    213  OE1 GLN    13       18.036  -
6.611   4.520  1.00  0.00      BrD ATOM    214  NE2 GLN    13       17.739  -
8.128   2.892  1.00  0.00      BrD ATOM    215 HE21 GLN    13       18.668  -
8.427   2.985  1.00  0.00      BrD ATOM    216 HE22 GLN    13       17.108  -
8.512   2.248  1.00  0.00      BrD ATOM    217  C   GLN    13       13.615  -
6.060   1.097  1.00  0.00      BrD ATOM    218  O   GLN    13       12.855  -
6.950   1.478  1.00  0.00      BrD ATOM    219  N   LEU    14       13.191  -
4.880   0.662  1.00  0.00      BrD ATOM    220  HN  LEU    14       13.848  -
4.214   0.371  1.00  0.00      BrD ATOM    221  CA  LEU    14       11.774  -
4.558   0.595  1.00  0.00      BrD ATOM    222  HA  LEU    14       11.303  -
4.943   1.487  1.00  0.00      BrD ATOM    223  CB  LEU    14       11.581  -
3.042   0.541  1.00  0.00      BrD ATOM    224  HB1 LEU    14       12.212  -
2.592   1.292  1.00  0.00      BrD ATOM    225  HB2 LEU    14       10.552  -
2.823   0.781  1.00  0.00      BrD ATOM    226  CG  LEU    14       11.905  -
2.399  -0.808  1.00  0.00      BrD ATOM    227  HG  LEU    14       12.685  -
2.967  -1.292  1.00  0.00      BrD ATOM    228  CD1 LEU    14       12.409  -
0.978  -0.615  1.00  0.00      BrD ATOM    229 HD11 LEU    14       11.569  -
0.311  -0.497  1.00  0.00      BrD ATOM    230 HD12 LEU    14       12.986  -
0.682  -1.479  1.00  0.00      BrD ATOM    231 HD13 LEU    14       13.032  -
0.934   0.266  1.00  0.00      BrD ATOM    232  CD2 LEU    14       10.682  -
2.418  -1.709  1.00  0.00      BrD ATOM    233 HD21 LEU    14       10.185  -
1.461  -1.660  1.00  0.00      BrD ATOM    234 HD22 LEU    14       10.005  -
3.192  -1.383  1.00  0.00      BrD ATOM    235 HD23 LEU    14       10.989  -
2.612  -2.727  1.00  0.00      BrD ATOM    236  C   LEU    14       11.130  -
5.209  -0.623  1.00  0.00      BrD ATOM    237  O   LEU    14        9.989  -
5.666  -0.564  1.00  0.00      BrD ATOM    238  N   TYR    15       11.866  -
5.241  -1.729  1.00  0.00      BrD ATOM    239  HN  TYR    15       12.772  -
4.865  -1.714  1.00  0.00      BrD ATOM    240  CA  TYR    15       11.364  -
5.841  -2.959  1.00  0.00      BrD ATOM    241  HA  TYR    15       10.539  -
5.237  -3.312  1.00  0.00      BrD ATOM    242  CB  TYR    15       12.460  -
5.865  -4.029  1.00  0.00      BrD ATOM    243  HB1 TYR    15       13.317  -
6.397  -3.642  1.00  0.00      BrD ATOM    244  HB2 TYR    15       12.748  -
4.850  -4.259  1.00  0.00      BrD ATOM    245  CG  TYR    15       12.043  -
6.533  -5.323  1.00  0.00      BrD ATOM    246  CD1 TYR    15       12.993  -
7.047  -6.197  1.00  0.00      BrD ATOM    247  HD1 TYR    15       14.040  -
6.968  -5.940  1.00  0.00      BrD ATOM    248  CD2 TYR    15       10.702  -
6.642  -5.675  1.00  0.00      BrD ATOM    249  HD2 TYR    15        9.950  -
6.248  -5.008  1.00  0.00      BrD ATOM    250  CE1 TYR    15       12.620  -
7.654  -7.381  1.00  0.00      BrD ATOM    251  HE1 TYR    15       13.374  -
8.049  -8.046  1.00  0.00      BrD ATOM    252  CE2 TYR    15       10.322  -
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REPLACEMENT SHEET

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 7.249  -6.857  1.00  0.00      BrD ATOM   253  HE2 TYR    15       9.275  -
 7.326  -7.111  1.00  0.00      BrD ATOM   254  CZ  TYR    15      11.284  -
 7.752  -7.706  1.00  0.00      BrD ATOM   255  OH  TYR    15      10.908  -
 8.358  -8.883  1.00  0.00      BrD ATOM   256  HH  TYR    15      10.572  -
 9.238  -8.697  1.00  0.00      BrD ATOM   257  C   TYR    15      10.859  -
 7.253  -2.696  1.00  0.00      BrD ATOM   258  O   TYR    15       9.778  -
 7.630  -3.146  1.00  0.00      BrD ATOM   259  N   SER    16      11.641  -
 8.026  -1.950  1.00  0.00      BrD ATOM   260  HN  SER    16      12.485  -
 7.666  -1.605  1.00  0.00      BrD ATOM   261  CA  SER    16      11.249  -
 9.384  -1.602  1.00  0.00      BrD ATOM   262  HA  SER    16      11.148  -
 9.946  -2.518  1.00  0.00      BrD ATOM   263  CB  SER    16      12.315  -
10.040  -0.722  1.00  0.00      BrD ATOM   264  HB1 SER    16      12.503  -
 9.416   0.139  1.00  0.00      BrD ATOM   265  HB2 SER    16      13.227  -
10.155  -1.289  1.00  0.00      BrD ATOM   266  OG  SER    16      11.892  -
11.317  -0.276  1.00  0.00      BrD ATOM   267  HG  SER    16      12.601  -
11.952  -0.405  1.00  0.00      BrD ATOM   268  C   SER    16       9.909  -
 9.370  -0.879  1.00  0.00      BrD ATOM   269  O   SER    16       9.028  -
10.182  -1.161  1.00  0.00      BrD ATOM   270  N   THR    17       9.756  -
 8.420   0.038  1.00  0.00      BrD ATOM   271  HN  THR    17      10.493  -
 7.796   0.207  1.00  0.00      BrD ATOM   272  CA  THR    17       8.514  -
 8.269   0.785  1.00  0.00      BrD ATOM   273  HA  THR    17       8.318  -
 9.200   1.296  1.00  0.00      BrD ATOM   274  CB  THR    17       8.656  -
 7.146   1.820  1.00  0.00      BrD ATOM   275  HB  THR    17       9.069  -
 6.275   1.333  1.00  0.00      BrD ATOM   276  OG1 THR    17       9.539  -
 7.535   2.857  1.00  0.00      BrD ATOM   277  HG1 THR    17      10.426  -
 7.633   2.502  1.00  0.00      BrD ATOM   278  CG2 THR    17       7.346  -
 6.733   2.463  1.00  0.00      BrD ATOM   279 HG21 THR    17       6.714  -
 7.600   2.589  1.00  0.00      BrD ATOM   280 HG22 THR    17       6.845  -
 6.012   1.832  1.00  0.00      BrD ATOM   281 HG23 THR    17       7.545  -
 6.289   3.427  1.00  0.00      BrD ATOM   282  C   THR    17       7.356  -
 7.971  -0.161  1.00  0.00      BrD ATOM   283  O   THR    17       6.420  -
 8.757  -0.277  1.00  0.00      BrD ATOM   284  N   LEU    18       7.438  -
 6.832  -0.843  1.00  0.00      BrD ATOM   285  HN  LEU    18       8.212  -
 6.247  -0.702  1.00  0.00      BrD ATOM   286  CA  LEU    18       6.396  -
 6.414  -1.776  1.00  0.00      BrD ATOM   287  HA  LEU    18       5.534  -
 6.122  -1.197  1.00  0.00      BrD ATOM   288  CB  LEU    18       6.871  -
 5.218  -2.591  1.00  0.00      BrD ATOM   289  HB1 LEU    18       7.669  -
 5.542  -3.243  1.00  0.00      BrD ATOM   290  HB2 LEU    18       6.049  -
 4.869  -3.198  1.00  0.00      BrD ATOM   291  CG  LEU    18       7.377  -
 4.056  -1.750  1.00  0.00      BrD ATOM   292  HG  LEU    18       8.301  -
 4.350  -1.275  1.00  0.00      BrD ATOM   293  CD1 LEU    18       7.653  -
 2.840  -2.622  1.00  0.00      BrD ATOM   294 HD11 LEU    18       6.966  -
 2.832  -3.455  1.00  0.00      BrD ATOM   295 HD12 LEU    18       8.667  -
 2.885  -2.994  1.00  0.00      BrD ATOM   296 HD13 LEU    18       7.523  -
 1.941  -2.039  1.00  0.00      BrD ATOM   297  CD2 LEU    18       6.369  -
 3.727  -0.658  1.00  0.00      BrD ATOM   298 HD21 LEU    18       5.417  -
 4.180  -0.897  1.00  0.00      BrD ATOM   299 HD22 LEU    18       6.252  -
 2.657  -0.584  1.00  0.00      BrD ATOM   300 HD23 LEU    18       6.722  -
 4.117   0.284  1.00  0.00      BrD ATOM   301  C   LEU    18       5.998  -
 7.542  -2.707  1.00  0.00      BrD ATOM   302  O   LEU    18       4.869  -
 8.021  -2.667  1.00  0.00      BrD ATOM   303  N   LYS    19       6.926  -
 7.967  -3.552  1.00  0.00      BrD ATOM   304  HN  LYS    19       7.813  -
 7.550  -3.543  1.00  0.00      BrD ATOM   305  CA  LYS    19       6.648  -
 9.050  -4.487  1.00  0.00      BrD ATOM   306  HA  LYS    19       5.959  -
 8.673  -5.228  1.00  0.00      BrD ATOM   307  CB  LYS    19       7.935  -
 9.498  -5.193  1.00  0.00      BrD ATOM   308  HB1 LYS    19       7.671  -
 9.974  -6.126  1.00  0.00      BrD ATOM   309  HB2 LYS    19       8.535  -
 8.625  -5.404  1.00  0.00      BrD ATOM   310  CG  LYS    19       8.785  -
10.472  -4.390  1.00  0.00      BrD ATOM   311  HG1 LYS    19       8.296  -
11.438  -4.386  1.00  0.00      BrD ATOM   312  HG2 LYS    19       8.878  -
10.106  -3.378  1.00  0.00      BrD ATOM   313  CD  LYS    19      10.172  -
10.621  -4.992  1.00  0.00      BrD ATOM   314  HD1 LYS    19      10.575  -
 9.638  -5.190  1.00  0.00      BrD ATOM   315  HD2 LYS    19      10.807  -
11.137  -4.287  1.00  0.00      BrD ATOM   316  CE  LYS    19      10.133  -
11.409  -6.290  1.00  0.00      BrD ATOM   317  HE1 LYS    19       9.337  -
11.019  -6.908  1.00  0.00      BrD ATOM   318  HE2 LYS    19      11.077  -
11.288  -6.800  1.00  0.00      BrD ATOM   319  NZ  LYS    19       9.893  -
12.858  -6.050  1.00  0.00      BrD ATOM   320  HZ1 LYS    19       9.982  -
13.072  -5.036  1.00  0.00      BrD ATOM   321  HZ2 LYS    19      10.587  -
13.427  -6.576  1.00  0.00      BrD ATOM   322  HZ3 LYS    19       8.937  -
13.119  -6.366  1.00  0.00      BrD ATOM   323  C   LYS    19       5.988  -
10.223  -3.761  1.00  0.00      BrD ATOM   324  O   LYS    19       5.193  -
10.960  -4.341  1.00  0.00      BrD ATOM   325  N   SER    20       6.299  -
10.359  -2.474  1.00  0.00      BrD ATOM   326  HN  SER    20       6.925  -
 9.721  -2.061  1.00  0.00      BrD ATOM   327  CA  SER    20       5.722  -
11.425  -1.661  1.00  0.00      BrD ATOM   328  HA  SER    20       5.660  -
12.306  -2.277  1.00  0.00      BrD ATOM   329  CB  SER    20       6.608  -
11.725  -0.449  1.00  0.00      BrD ATOM   330  HB1 SER    20       7.086  -
10.815  -0.120  1.00  0.00      BrD ATOM   331  HB2 SER    20       5.999  -
12.121   0.350  1.00  0.00      BrD ATOM   332  OG  SER    20       7.610  -
12.674  -0.772  1.00  0.00      BrD ATOM   333  HG  SER    20       7.218  -
13.396  -1.269  1.00  0.00      BrD ATOM   334  C   SER    20       4.316  -
11.056  -1.207  1.00  0.00      BrD ATOM   335  O   SER    20       3.334  -
11.659  -1.642  1.00  0.00      BrD ATOM   336  N   ILE    21       4.218  -
10.045  -0.349  1.00  0.00      BrD ATOM   337  HN  ILE    21       5.031  -
 9.592  -0.044  1.00  0.00      BrD ATOM   338  CA  ILE    21       2.919  -
 9.583   0.129  1.00  0.00      BrD ATOM   339  HA  ILE    21       2.508  -
10.348   0.771  1.00  0.00      BrD ATOM   340  CB  ILE    21       3.036  -
 8.280   0.945  1.00  0.00      BrD ATOM   341  HB  ILE    21       2.050  -
 7.850   1.036  1.00  0.00      BrD ATOM   342 CG1 ILE    21       3.956  -
 7.280   0.240  1.00  0.00      BrD ATOM   343 HG11 ILE    21       4.639  -
 6.858   0.962  1.00  0.00      BrD ATOM   344 HG12 ILE    21       4.519  -
 7.792  -0.521  1.00  0.00      BrD ATOM   345 CG2 ILE    21       3.549  -
 8.579   2.346  1.00  0.00      BrD ATOM   346 HG21 ILE    21       4.618  -
 8.431   2.377  1.00  0.00      BrD ATOM   347 HG22 ILE    21       3.319  -
 9.603   2.603  1.00  0.00      BrD ATOM   348 HG23 ILE    21       3.073  -
 7.915   3.053  1.00  0.00      BrD ATOM   349  CD1 ILE    21       3.222  -
 6.140  -0.427  1.00  0.00      BrD ATOM   350 HD11 ILE    21       3.805  -
 5.235  -0.338  1.00  0.00      BrD ATOM   351 HD12 ILE    21       2.264  -
 6.000   0.051  1.00  0.00      BrD ATOM   352 HD13 ILE    21       3.075  -
 6.371  -1.472  1.00  0.00      BrD ATOM   353  C   ILE    21       1.969  -
 9.361  -1.044  1.00  0.00      BrD ATOM   354  O   ILE    21       0.869  -
 9.901  -1.074  1.00  0.00      BrD ATOM   355  N   LEU    22       2.433  -
 8.608  -2.034  1.00  0.00      BrD ATOM   356  HN  LEU    22       3.325  -
 8.224  -1.957  1.00  0.00      BrD ATOM   357  CA  LEU    22       1.648  -
 8.337  -3.229  1.00  0.00      BrD ATOM   358  HA  LEU    22       0.757  -
 7.807  -2.929  1.00  0.00      BrD ATOM   359  CB  LEU    22       2.451  -
 7.465  -4.197  1.00  0.00      BrD ATOM   360  HB1 LEU    22       3.352  -
 7.996  -4.462  1.00  0.00      BrD ATOM   361  HB2 LEU    22       2.728  -
 6.556  -3.683  1.00  0.00      BrD ATOM   362  CG  LEU    22       1.722  -
 7.084  -5.486  1.00  0.00      BrD ATOM   363  HG  LEU    22       1.378  -
 7.982  -5.977  1.00  0.00      BrD ATOM   364  CD1 LEU    22       2.665  -
 6.362  -6.437  1.00  0.00      BrD ATOM   365 HD11 LEU    22       2.220  -
 6.314  -7.419  1.00  0.00      BrD ATOM   366 HD12 LEU    22       3.601  -
 6.898  -6.492  1.00  0.00      BrD ATOM   367 HD13 LEU    22       2.845  -
 5.361  -6.074  1.00  0.00      BrD ATOM   368  CD2 LEU    22       0.507  -
 6.222  -5.178  1.00  0.00      BrD ATOM   369 HD21 LEU    22       0.127  -
 6.472  -4.199  1.00  0.00      BrD ATOM   370 HD22 LEU    22      -0.259  -
 6.401  -5.918  1.00  0.00      BrD ATOM   371 HD23 LEU    22       0.790  -
 5.180  -5.199  1.00  0.00      BrD ATOM   372  C   LEU    22       1.243  -
 9.636  -3.915  1.00  0.00      BrD ATOM   373  O   LEU    22       0.086  -
 9.813  -4.295  1.00  0.00      BrD ATOM   374  N   GLN    23       2.201  -
10.552  -4.058  1.00  0.00      BrD ATOM   375  HN  GLN    23       3.107  -
10.354  -3.735  1.00  0.00      BrD ATOM   376  CA  GLN    23       1.941  -
11.841  -4.693  1.00  0.00      BrD ATOM   377  HA  GLN    23       1.828  -
11.670  -5.754  1.00  0.00      BrD ATOM   378  CB  GLN    23       3.118  -
12.793  -4.464  1.00  0.00      BrD ATOM   379  HB1 GLN    23       3.720  -
12.412  -3.653  1.00  0.00      BrD ATOM   380  HB2 GLN    23       2.731  -
13.763  -4.186  1.00  0.00      BrD ATOM   381  CG  GLN    23       4.012  -
12.969  -5.682  1.00  0.00      BrD ATOM   382  HG1 GLN    23       4.318  -
11.995  -6.035  1.00  0.00      BrD ATOM   383  HG2 GLN    23       4.886  -
13.535  -5.393  1.00  0.00      BrD ATOM   384  CD  GLN    23       3.316  -
13.697  -6.815  1.00  0.00      BrD ATOM   385  OE1 GLN    23       2.624  -
14.692  -6.597  1.00  0.00      BrD ATOM   386  NE2 GLN    23       3.494  -
13.203  -8.034  1.00  0.00      BrD ATOM   387 HE21 GLN    23       4.058  -
12.408  -8.134  1.00  0.00      BrD ATOM   388 HE22 GLN    23       3.055  -
13.654  -8.786  1.00  0.00      BrD ATOM   389  C   GLN    23       0.655  -
12.467  -4.157  1.00  0.00      BrD ATOM   390  O   GLN    23      -0.207  -
12.892  -4.925  1.00  0.00      BrD ATOM   391  N   GLN    24       0.530  -
12.519  -2.833  1.00  0.00      BrD ATOM   392  HN  GLN    24       1.252  -
12.167  -2.269  1.00  0.00      BrD ATOM   393  CA  GLN    24      -0.654  -
13.096  -2.203  1.00  0.00      BrD ATOM   394  HA  GLN    24      -0.951  -
13.947  -2.797  1.00  0.00      BrD ATOM   395  CB  GLN    24      -0.325  -
13.584  -0.783  1.00  0.00      BrD ATOM   396  HB1 GLN    24       0.666  -
14.012  -0.785  1.00  0.00      BrD ATOM   397  HB2 GLN    24      -1.035  -
14.351  -0.509  1.00  0.00      BrD ATOM   398  CG  GLN    24      -0.369  -
12.498   0.284  1.00  0.00      BrD ATOM   399  HG1 GLN    24      -1.331  -
12.531   0.774  1.00  0.00      BrD ATOM   400  HG2 GLN    24      -0.243  -
11.539  -0.192  1.00  0.00      BrD ATOM   401  CD  GLN    24       0.714  -
12.663   1.333  1.00  0.00      BrD ATOM   402  OE1 GLN    24       0.426  -
12.791   2.524  1.00  0.00      BrD ATOM   403  NE2 GLN    24       1.967  -
12.659   0.897  1.00  0.00      BrD ATOM   404 HE21 GLN    24       2.122  -
12.552  -0.065  1.00  0.00      BrD ATOM   405 HE22 GLN    24       2.687  -
12.763   1.554  1.00  0.00      BrD ATOM   406  C   GLN    24      -1.816  -
12.099  -2.179  1.00  0.00      BrD ATOM   407  O   GLN    24      -2.974  -
12.485  -2.331  1.00  0.00      BrD ATOM   408  N   VAL    25      -1.501  -
10.821  -1.974  1.00  0.00      BrD ATOM   409  HN  VAL    25      -0.561  -
10.575  -1.859  1.00  0.00      BrD ATOM   410  CA  VAL    25      -2.523  -
 9.776  -1.922  1.00  0.00      BrD ATOM   411  HA  VAL    25      -3.121  -
 9.941  -1.036  1.00  0.00      BrD ATOM   412  CB  VAL    25      -1.890  -
 8.369  -1.813  1.00  0.00      BrD ATOM   413  HB  VAL    25      -1.198  -
 8.243  -2.632  1.00  0.00      BrD ATOM   414 CG1 VAL    25      -1.116  -
 8.236  -0.510  1.00  0.00      BrD ATOM   415 HG11 VAL    25      -1.590  -
 7.494   0.116  1.00  0.00      BrD ATOM   416 HG12 VAL    25      -0.102  -
 7.932  -0.722  1.00  0.00      BrD ATOM   417 HG13 VAL    25      -1.108  -
 9.186   0.003  1.00  0.00      BrD ATOM   418 CG2 VAL    25      -2.945  -
 7.277  -1.908  1.00  0.00      BrD ATOM   419 HG21 VAL    25      -3.437  -
 7.331  -2.868  1.00  0.00      BrD ATOM   420 HG22 VAL    25      -2.472  -
 6.313  -1.799  1.00  0.00      BrD ATOM   421 HG23 VAL    25      -3.672  -
 7.410  -1.121  1.00  0.00      BrD ATOM   422  C   VAL    25      -3.440  -
 9.846  -3.141  1.00  0.00      BrD ATOM   423  O   VAL    25      -4.659  -
 9.930  -3.000  1.00  0.00      BrD ATOM   424  N   LYS    26      -2.858  -
 9.858  -4.336  1.00  0.00      BrD ATOM   425  HN  LYS    26      -1.883  -
 9.798  -4.396  1.00  0.00      BrD ATOM   426  CA  LYS    26      -3.648  -
 9.943  -5.562  1.00  0.00      BrD ATOM   427  HA  LYS    26      -4.174  -
 9.008  -5.678  1.00  0.00      BrD ATOM   428  CB  LYS    26      -2.737  -
10.161  -6.771  1.00  0.00      BrD ATOM   429  HB1 LYS    26      -3.314  -
10.018  -7.673  1.00  0.00      BrD ATOM   430  HB2 LYS    26      -1.942  -
 9.430  -6.744  1.00  0.00      BrD ATOM   431  CG  LYS    26      -2.111  -
11.545  -6.820  1.00  0.00      BrD ATOM   432  HG1 LYS    26      -2.070  -
11.947  -5.818  1.00  0.00      BrD ATOM   433  HG2 LYS    26      -2.721  -
12.183  -7.442  1.00  0.00      BrD ATOM   434  CD  LYS    26      -0.702  -
11.500  -7.391  1.00  0.00      BrD ATOM   435  HD1 LYS    26      -0.214  -
10.600  -7.048  1.00  0.00      BrD ATOM   436  HD2 LYS    26      -0.156  -
12.364  -7.043  1.00  0.00      BrD ATOM   437  CE  LYS    26      -0.716  -
11.505  -8.910  1.00  0.00      BrD ATOM   438  HE1 LYS    26       0.003  -
10.782  -9.266  1.00  0.00      BrD ATOM   439  HE2 LYS    26      -1.703  -
11.228  -9.249  1.00  0.00      BrD ATOM   440  NZ  LYS    26      -0.371  -
12.844  -9.465  1.00  0.00      BrD ATOM   441  HZ1 LYS    26      -1.215  -
13.285  -9.884  1.00  0.00      BrD ATOM   442  HZ2 LYS    26      -0.010  -
13.461  -8.710  1.00  0.00      BrD ATOM   443  HZ3 LYS    26       0.358  -
12.749 -10.199  1.00  0.00      BrD ATOM   444  C   LYS    26      -4.673  -
11.073  -5.468  1.00  0.00      BrD ATOM   445  O   LYS    26      -5.762  -
10.991  -6.036  1.00  0.00      BrD ATOM   446  N   SER    27      -4.315  -
12.118  -4.732  1.00  0.00      BrD ATOM   447  HN  SER    27      -3.439  -
12.109  -4.293  1.00  0.00      BrD ATOM   448  CA  SER    27      -5.204  -
13.257  -4.516  1.00  0.00      BrD ATOM   449  HA  SER    27      -6.104  -
13.100  -5.091  1.00  0.00      BrD ATOM   450  CB  SER    27      -4.532  -
14.553  -4.976  1.00  0.00      BrD ATOM   451  HB1 SER    27      -3.629  -
14.710  -4.404  1.00  0.00      BrD ATOM   452  HB2 SER    27      -5.207  -
15.381  -4.818  1.00  0.00      BrD ATOM   453  OG  SER    27      -4.197  -
14.492  -6.351  1.00  0.00      BrD ATOM   454  HG  SER    27      -3.746  -
15.300  -6.606  1.00  0.00      BrD ATOM   455  C   SER    27      -5.591  -
13.361  -3.050  1.00  0.00      BrD ATOM   456  O   SER    27      -5.962  -
14.431  -2.567  1.00  0.00      BrD ATOM   457  N   HIS    28      -5.477  -
12.246  -2.339  1.00  0.00      BrD ATOM   458  HN  HIS    28      -5.215  -
11.418  -2.785  1.00  0.00      BrD ATOM   459  CA  HIS    28      -5.863  -
12.197  -0.946  1.00  0.00      BrD ATOM   460  HA  HIS    28      -5.597  -
13.142  -0.497  1.00  0.00      BrD ATOM   461  CB  HIS    28      -5.125  -
11.076  -0.217  1.00  0.00      BrD ATOM   462  HB1 HIS    28      -4.073  -
11.308  -0.210  1.00  0.00      BrD ATOM   463  HB2 HIS    28      -5.283  -
10.146  -0.742  1.00  0.00      BrD ATOM   464  CG  HIS    28      -5.549  -
10.884   1.205  1.00  0.00      BrD ATOM   465  ND1 HIS    28      -5.742  -
11.931   2.081  1.00  0.00      BrD ATOM   466  HD1 HIS    28      -5.645  -
12.883   1.866  1.00  0.00      BrD ATOM   467  CD2 HIS    28      -5.780  -
 9.754   1.916  1.00  0.00      BrD ATOM   468  HD2 HIS    28      -5.717  -
 8.739   1.549  1.00  0.00      BrD ATOM   469  CE1 HIS    28      -6.092  -
11.456   3.262  1.00  0.00      BrD ATOM   470  HE1 HIS    28      -6.314  -
12.044   4.141  1.00  0.00      BrD ATOM   471  NE2 HIS    28      -6.119  -
10.139   3.189  1.00  0.00      BrD ATOM   472  HE2 HIS    28      -6.350  -
 9.536   3.925  1.00  0.00      BrD ATOM   473  C   HIS    28      -7.364  -
12.017  -0.850  1.00  0.00      BrD ATOM   474  O   HIS    28      -7.979  -
11.356  -1.686  1.00  0.00      BrD ATOM   475  N   GLN    29      -7.954  -
12.666   0.128  1.00  0.00      BrD ATOM   476  HN  GLN    29      -7.404  -
13.189   0.747  1.00  0.00      BrD ATOM   477  CA  GLN    29      -9.397  -
12.630   0.298  1.00  0.00      BrD ATOM   478  HA  GLN    29      -9.836  -
12.688  -0.687  1.00  0.00      BrD ATOM   479  CB  GLN    29      -9.840  -
13.850   1.090  1.00  0.00      BrD ATOM   480  HB1 GLN    29      -9.485  -
13.761   2.106  1.00  0.00      BrD ATOM   481  HB2 GLN    29     -10.918  -
13.901   1.092  1.00  0.00      BrD ATOM   482  CG  GLN    29      -9.294  -
15.138   0.496  1.00  0.00      BrD ATOM   483  HG1 GLN    29      -8.707  -
14.887  -0.386  1.00  0.00      BrD ATOM   484  HG2 GLN    29      -8.660  -
15.618   1.227  1.00  0.00      BrD ATOM   485  CD  GLN    29     -10.390  -
16.105   0.093  1.00  0.00      BrD ATOM   486  OE1 GLN    29     -10.358  -
16.679  -0.996  1.00  0.00      BrD ATOM   487  NE2 GLN    29     -11.368  -
16.290   0.971  1.00  0.00      BrD ATOM   488 HE21 GLN    29     -12.090  -
16.910   0.737  1.00  0.00      BrD ATOM   489 HE22 GLN    29     -11.329  -
15.800   1.819  1.00  0.00      BrD ATOM   490  C   GLN    29      -9.866  -
11.332   0.951  1.00  0.00      BrD ATOM   491  O   GLN    29     -11.065  -
11.111   1.116  1.00  0.00      BrD ATOM   492  N   SER    30      -8.921  -
10.450   1.262  1.00  0.00      BrD ATOM   493  HN  SER    30      -7.985  -
10.661   1.074  1.00  0.00      BrD ATOM   494  CA  SER    30      -9.246  -
 9.143   1.805  1.00  0.00      BrD ATOM   495  HA  SER    30     -10.319  -
 9.036   1.787  1.00  0.00      BrD ATOM   496  CB  SER    30      -8.759  -
 9.026   3.250  1.00  0.00      BrD ATOM   497  HB1 SER    30      -7.829  -
 8.479   3.271  1.00  0.00      BrD ATOM   498  HB2 SER    30      -9.499  -
 8.500   3.835  1.00  0.00      BrD ATOM   499  OG  SER    30      -8.552  -
10.307   3.823  1.00  0.00      BrD ATOM   500  HG  SER    30      -9.322  -
10.857   3.664  1.00  0.00      BrD ATOM   501  C   SER    30      -8.627  -
 8.036   0.945  1.00  0.00      BrD ATOM   502  O   SER    30      -8.726  -
 6.855   1.276  1.00  0.00      BrD ATOM   503  N   ALA    31      -7.977  -
 8.425  -0.157  1.00  0.00      BrD ATOM   504  HN  ALA    31      -7.935  -
 9.377  -0.385  1.00  0.00      BrD ATOM   505  CA  ALA    31      -7.365  -
 7.462  -1.066  1.00  0.00      BrD ATOM   506  HA  ALA    31      -6.927  -
 6.675  -0.470  1.00  0.00      BrD ATOM   507  CB  ALA    31      -6.251  -
 8.123  -1.861  1.00  0.00      BrD ATOM   508  HB1 ALA    31      -5.395  -
 8.274  -1.223  1.00  0.00      BrD ATOM   509  HB2 ALA    31      -5.974  -
 7.489  -2.691  1.00  0.00      BrD ATOM   510  HB3 ALA    31      -6.593  -
 9.076  -2.236  1.00  0.00      BrD ATOM   511  C   ALA    31      -8.397  -
 6.851  -2.014  1.00  0.00      BrD ATOM   512  O   ALA    31      -8.097  -
 5.900  -2.736  1.00  0.00      BrD ATOM   513  N   TRP    32      -9.614  -
 7.396  -2.010  1.00  0.00      BrD ATOM   514  HN  TRP    32      -9.795  -
 8.160  -1.427  1.00  0.00      BrD ATOM   515  CA  TRP    32     -10.669  -
 6.906  -2.893  1.00  0.00      BrD ATOM   516  HA  TRP    32     -10.362  -
 7.135  -3.902  1.00  0.00      BrD ATOM   517  CB  TRP    32     -12.002  -
 7.630  -2.628  1.00  0.00      BrD ATOM   518  HB1 TRP    32     -12.770  -
 7.192  -3.249  1.00  0.00      BrD ATOM   519  HB2 TRP    32     -11.894  -
 8.671  -2.881  1.00  0.00      BrD ATOM   520  CG  TRP    32     -12.454  -
 7.544  -1.209  1.00  0.00      BrD ATOM   521  CD1 TRP    32     -12.415  -
 8.532  -0.267  1.00  0.00      BrD ATOM   522  HD1 TRP    32     -12.058  -
 9.535  -0.450  1.00  0.00      BrD ATOM   523  CD2 TRP    32     -12.993  -
 6.393  -0.565  1.00  0.00      BrD ATOM   524  NE1 TRP    32     -12.895  -
 8.057   0.929  1.00  0.00      BrD ATOM   525  HE1 TRP    32     -12.970  -
 8.574   1.758  1.00  0.00      BrD ATOM   526  CE2 TRP    32     -13.253  -
 6.743   0.770  1.00  0.00      BrD ATOM   527  CE3 TRP    32     -13.270  -
 5.095  -0.991  1.00  0.00      BrD ATOM   528  HE3 TRP    32     -13.068  -
 4.788  -2.006  1.00  0.00      BrD ATOM   529  CZ2 TRP    32     -13.784  -
 5.839   1.681  1.00  0.00      BrD ATOM   530  HZ2 TRP    32     -13.983  -
 6.109   2.708  1.00  0.00      BrD ATOM   531  CZ3 TRP    32     -13.786  -
 4.196  -0.086  1.00  0.00      BrD ATOM   532  HZ3 TRP    32     -14.003  -
 3.185  -0.396  1.00  0.00      BrD ATOM   533  CH2 TRP    32     -14.055  -
 4.577   1.230  1.00  0.00      BrD ATOM   534  HH2 TRP    32     -14.420  -
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REPLACEMENT SHEET

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3.838   1.903  1.00  0.00      BrD ATOM   535  C   TRP   32     -10.855  -
5.382  -2.797  1.00  0.00      BrD ATOM   536  O   TRP   32     -11.199  -
4.752  -3.797  1.00  0.00      BrD ATOM   537  N   PRO   33     -10.636  -
4.741  -1.618  1.00  0.00      BrD ATOM   538  CA  PRO   33     -10.800  -
3.297  -1.493  1.00  0.00      BrD ATOM   539  HA  PRO   33     -11.693  -
2.959  -1.999  1.00  0.00      BrD ATOM   540  CB  PRO   33     -10.947  -
3.057   0.017  1.00  0.00      BrD ATOM   541  HB1 PRO   33     -10.191  -
2.357   0.341  1.00  0.00      BrD ATOM   542  HB2 PRO   33     -11.926  -
2.646   0.219  1.00  0.00      BrD ATOM   543  CG  PRO   33     -10.771  -
4.386   0.685  1.00  0.00      BrD ATOM   544  HG1 PRO   33     -11.713  -
4.744   1.048  1.00  0.00      BrD ATOM   545  HG2 PRO   33     -10.075  -
4.288   1.505  1.00  0.00      BrD ATOM   546  CD  PRO   33     -10.223  -
5.333  -0.337  1.00  0.00      BrD ATOM   547  HD1 PRO   33     -10.632  -
6.319  -0.205  1.00  0.00      BrD ATOM   548  HD2 PRO   33      -9.165  -
5.358  -0.254  1.00  0.00      BrD ATOM   549  C   PRO   33      -9.596  -
2.535  -2.040  1.00  0.00      BrD ATOM   550  O   PRO   33      -9.687  -
1.343  -2.332  1.00  0.00      BrD ATOM   551  N   PHE   34      -8.472  -
3.233  -2.187  1.00  0.00      BrD ATOM   552  HN  PHE   34      -8.458  -
4.180  -1.936  1.00  0.00      BrD ATOM   553  CA  PHE   34      -7.256  -
2.619  -2.703  1.00  0.00      BrD ATOM   554  HA  PHE   34      -7.295  -
1.564  -2.475  1.00  0.00      BrD ATOM   555  CB  PHE   34      -6.026  -
3.228  -2.030  1.00  0.00      BrD ATOM   556  HB1 PHE   34      -5.773  -
4.150  -2.531  1.00  0.00      BrD ATOM   557  HB2 PHE   34      -5.198  -
2.540  -2.118  1.00  0.00      BrD ATOM   558  CG  PHE   34      -6.228  -
3.531  -0.573  1.00  0.00      BrD ATOM   559  CD1 PHE   34      -6.985  -
2.689   0.226  1.00  0.00      BrD ATOM   560  HD1 PHE   34      -7.430  -
1.805  -0.208  1.00  0.00      BrD ATOM   561  CD2 PHE   34      -5.663  -
4.659  -0.003  1.00  0.00      BrD ATOM   562  HD2 PHE   34      -5.074  -
5.324  -0.617  1.00  0.00      BrD ATOM   563  CE1 PHE   34      -7.175  -
2.968   1.566  1.00  0.00      BrD ATOM   564  HE1 PHE   34      -7.767  -
2.303   2.179  1.00  0.00      BrD ATOM   565  CE2 PHE   34      -5.852  -
4.944   1.335  1.00  0.00      BrD ATOM   566  HE2 PHE   34      -5.409  -
5.829   1.765  1.00  0.00      BrD ATOM   567  CZ  PHE   34      -6.607  -
4.098   2.122  1.00  0.00      BrD ATOM   568  HZ  PHE   34      -6.753  -
4.319   3.168  1.00  0.00      BrD ATOM   569  C   PHE   34      -7.150  -
2.790  -4.213  1.00  0.00      BrD ATOM   570  O   PHE   34      -6.653  -
1.909  -4.907  1.00  0.00      BrD ATOM   571  N   MET   35      -7.624  -
3.923  -4.721  1.00  0.00      BrD ATOM   572  HN  MET   35      -8.000  -
4.598  -4.119  1.00  0.00      BrD ATOM   573  CA  MET   35      -7.545  -
4.205  -6.151  1.00  0.00      BrD ATOM   574  HA  MET   35      -6.600  -
3.825  -6.507  1.00  0.00      BrD ATOM   575  CB  MET   35      -7.593  -
5.706  -6.393  1.00  0.00      BrD ATOM   576  HB1 MET   35      -7.670  -
5.889  -7.454  1.00  0.00      BrD ATOM   577  HB2 MET   35      -8.463  -
6.114  -5.899  1.00  0.00      BrD ATOM   578  CG  MET   35      -6.367  -
6.423  -5.871  1.00  0.00      BrD ATOM   579  HG1 MET   35      -6.673  -
7.114  -5.107  1.00  0.00      BrD ATOM   580  HG2 MET   35      -5.696  -
5.692  -5.444  1.00  0.00      BrD ATOM   581  SD  MET   35      -5.490  -
7.322  -7.161  1.00  0.00      BrD ATOM   582  CE  MET   35      -4.032  -
6.298  -7.337  1.00  0.00      BrD ATOM   583  HE1 MET   35      -3.284  -
6.831  -7.905  1.00  0.00      BrD ATOM   584  HE2 MET   35      -3.639  -
6.062  -6.358  1.00  0.00      BrD ATOM   585  HE3 MET   35      -4.294  -
5.384  -7.850  1.00  0.00      BrD ATOM   586  C   MET   35      -8.661  -
3.519  -6.924  1.00  0.00      BrD ATOM   587  O   MET   35      -9.396  -
4.160  -7.675  1.00  0.00      BrD ATOM   588  N   GLU   36      -8.749  -
2.208  -6.762  1.00  0.00      BrD ATOM   589  HN  GLU   36      -8.116  -
1.765  -6.164  1.00  0.00      BrD ATOM   590  CA  GLU   36      -9.751  -
1.407  -7.457  1.00  0.00      BrD ATOM   591  HA  GLU   36      -9.531  -
1.453  -8.515  1.00  0.00      BrD ATOM   592  CB  GLU   36     -11.156  -
1.964  -7.207  1.00  0.00      BrD ATOM   593  HB1 GLU   36     -11.084  -
3.018  -6.987  1.00  0.00      BrD ATOM   594  HB2 GLU   36     -11.581  -
1.458  -6.354  1.00  0.00      BrD ATOM   595  CG  GLU   36     -12.099  -
1.787  -8.385  1.00  0.00      BrD ATOM   596  HG1 GLU   36     -11.527  -
1.466  -9.243  1.00  0.00      BrD ATOM   597  HG2 GLU   36     -12.569  -
2.735  -8.600  1.00  0.00      BrD ATOM   598  CD  GLU   36     -13.182  -
0.761  -8.114  1.00  0.00      BrD ATOM   599  OE1 GLU   36     -12.865  -
0.447  -8.098  1.00  0.00      BrD ATOM   600  OE2 GLU   36     -14.348  -
1.165  -7.919  1.00  0.00      BrD ATOM   601  C   GLU   36      -9.692  -
0.050  -7.001  1.00  0.00      BrD ATOM   602  O   GLU   36     -10.470  -
0.471  -6.145  1.00  0.00      BrD ATOM   603  N   PRO   37      -8.764  -
0.842  -7.565  1.00  0.00      BrD ATOM   604  CA  PRO   37      -8.604  -
2.255  -7.202  1.00  0.00      BrD ATOM   605  HA  PRO   37      -8.407  -
2.369  -6.146  1.00  0.00      BrD ATOM   606  CB  PRO   37      -7.376  -
2.709  -8.004  1.00  0.00      BrD ATOM   607  HB1 PRO   37      -7.696  -
3.306  -8.846  1.00  0.00      BrD ATOM   608  HB2 PRO   37      -6.728  -
3.295  -7.370  1.00  0.00      BrD ATOM   609  CG  PRO   37      -6.706  -
1.453  -8.451  1.00  0.00      BrD ATOM   610  HG1 PRO   37      -6.222  -
1.614  -9.403  1.00  0.00      BrD ATOM   611  HG2 PRO   37      -5.984  -
1.139  -7.711  1.00  0.00      BrD ATOM   612  CD  PRO   37      -7.793  -
0.426  -8.587  1.00  0.00      BrD ATOM   613  HD1 PRO   37      -8.229  -
0.465  -9.574  1.00  0.00      BrD ATOM   614  HD2 PRO   37      -7.410  -
0.561  -8.378  1.00  0.00      BrD ATOM   615  C   PRO   37      -9.822  -
3.093  -7.576  1.00  0.00      BrD ATOM   616  O   PRO   37     -10.678  -
2.655  -8.344  1.00  0.00      BrD ATOM   617  N   VAL   38      -9.892  -
4.301  -7.025  1.00  0.00      BrD ATOM   618  HN  VAL   38      -9.179  -
4.594  -6.422  1.00  0.00      BrD ATOM   619  CA  VAL   38     -11.006  -
5.206  -7.300  1.00  0.00      BrD ATOM   620  HA  VAL   38     -11.709  -
4.683  -7.931  1.00  0.00      BrD ATOM   621  CB  VAL   38     -11.750  -
5.646  -6.012  1.00  0.00      BrD ATOM   622  HB  VAL   38     -11.449  -
6.657  -5.781  1.00  0.00      BrD ATOM   623  CG1 VAL   38     -11.395  -
4.767  -4.819  1.00  0.00      BrD ATOM   624  HG11 VAL   38     -11.888  -
5.145  -3.935  1.00  0.00      BrD ATOM   625  HG12 VAL   38     -10.326  -
4.779  -4.667  1.00  0.00      BrD ATOM   626  HG13 VAL   38     -11.721  -
3.755  -5.008  1.00  0.00      BrD ATOM   627  CG2 VAL   38     -13.253  -
5.646  -6.246  1.00  0.00      BrD ATOM   628  HG21 VAL   38     -13.760  -
5.374  -5.333  1.00  0.00      BrD ATOM   629  HG22 VAL   38     -13.497  -
4.934  -7.020  1.00  0.00      BrD ATOM   630  HG23 VAL   38     -13.570  -
6.629  -6.553  1.00  0.00      BrD ATOM   631  C   VAL   38     -10.518  -
6.451  -8.035  1.00  0.00      BrD ATOM   632  O   VAL   38      -9.410  -
6.473  -8.571  1.00  0.00      BrD ATOM   633  N   LYS   39     -11.349  -
7.488  -8.051  1.00  0.00      BrD ATOM   634  HN  LYS   39     -12.215  -
7.412  -7.609  1.00  0.00      BrD ATOM   635  CA  LYS   39     -11.005  -
8.737  -8.715  1.00  0.00      BrD ATOM   636  HA  LYS   39      -9.947  -
8.906  -8.574  1.00  0.00      BrD ATOM   637  CB  LYS   39     -11.299  -
8.646 -10.216  1.00  0.00      BrD ATOM   638  HB1 LYS   39     -10.419  -
8.285 -10.714  1.00  0.00      BrD ATOM   639  HB2 LYS   39     -11.531  -
9.633 -10.587  1.00  0.00      BrD ATOM   640  CG  LYS   39     -12.452  -
7.722 -10.569  1.00  0.00      BrD ATOM   641  HG1 LYS   39     -12.970  -
7.450  -9.664  1.00  0.00      BrD ATOM   642  HG2 LYS   39     -13.127  -
8.241 -11.232  1.00  0.00      BrD ATOM   643  CD  LYS   39     -11.962  -
6.458 -11.256  1.00  0.00      BrD ATOM   644  HD1 LYS   39     -12.413  -
5.601 -10.777  1.00  0.00      BrD ATOM   645  HD2 LYS   39     -10.888  -
6.402 -11.160  1.00  0.00      BrD ATOM   646  CE  LYS   39     -12.326  -
6.447 -12.732  1.00  0.00      BrD ATOM   647  HE1 LYS   39     -11.779  -
5.653 -13.219  1.00  0.00      BrD ATOM   648  HE2 LYS   39     -12.044  -
7.395 -13.166  1.00  0.00      BrD ATOM   649  NZ  LYS   39     -13.784  -
6.232 -12.945  1.00  0.00      BrD ATOM   650  HZ1 LYS   39     -13.963  -
5.950 -13.930  1.00  0.00      BrD ATOM   651  HZ2 LYS   39     -14.307  -
7.108 -12.745  1.00  0.00      BrD ATOM   652  HZ3 LYS   39     -14.130  -
5.482 -12.313  1.00  0.00      BrD ATOM   653  C   LYS   39     -11.772  -
9.903  -8.105  1.00  0.00      BrD ATOM   654  O   LYS   39     -12.487  -
9.739  -7.116  1.00  0.00      BrD ATOM   655  N   ARG   40     -11.626  -
11.078  -8.706  1.00  0.00      BrD ATOM   656  HN  ARG   40     -11.040  -
11.146  -9.488  1.00  0.00      BrD ATOM   657  CA  ARG   40     -12.304  -
12.273  -8.223  1.00  0.00      BrD ATOM   658  HA  ARG   40     -12.018  -
12.419  -7.191  1.00  0.00      BrD ATOM   659  CB  ARG   40     -11.866  -
13.492  -9.037  1.00  0.00      BrD ATOM   660  HB1 ARG   40     -12.313  -
13.435 -10.019  1.00  0.00      BrD ATOM   661  HB2 ARG   40     -10.792  -
13.476  -9.139  1.00  0.00      BrD ATOM   662  CG  ARG   40     -12.265  -
14.819  -8.410  1.00  0.00      BrD ATOM   663  HG1 ARG   40     -12.664  -
14.634  -7.424  1.00  0.00      BrD ATOM   664  HG2 ARG   40     -13.020  -
15.285  -9.025  1.00  0.00      BrD ATOM   665  CD  ARG   40     -11.075  -
15.759  -8.292  1.00  0.00      BrD ATOM   666  HD1 ARG   40     -10.715  -
15.988  -9.284  1.00  0.00      BrD ATOM   667  HD2 ARG   40     -10.296  -
15.263  -7.732  1.00  0.00      BrD ATOM   668  NE  ARG   40     -11.426  -
17.004  -7.616  1.00  0.00      BrD ATOM   669  HE  ARG   40     -11.554  -
17.802  -8.171  1.00  0.00      BrD ATOM   670  CZ  ARG   40     -11.577  -
17.109  -6.300  1.00  0.00      BrD ATOM   671  NH1 ARG   40     -11.409  -
16.047  -5.525  1.00  0.00      BrD ATOM   672  HH11 ARG   40     -11.168  -
15.165  -5.930  1.00  0.00      BrD ATOM   673  HH12 ARG   40     -11.523  -
16.127  -4.535  1.00  0.00      BrD ATOM   674  NH2 ARG   40     -11.897  -
18.276  -5.758  1.00  0.00      BrD ATOM   675  HH21 ARG   40     -12.011  -
18.353  -4.767  1.00  0.00      BrD ATOM   676  HH22 ARG   40     -12.025  -
19.079  -6.339  1.00  0.00      BrD ATOM   677  C   ARG   40     -13.824  -
12.123  -8.293  1.00  0.00      BrD ATOM   678  O   ARG   40     -14.556  -
12.915  -7.700  1.00  0.00      BrD ATOM   679  N   THR   41     -14.301  -
11.109  -9.017  1.00  0.00      BrD ATOM   680  HN  THR   41     -13.680  -
10.511  -9.481  1.00  0.00      BrD ATOM   681  CA  THR   41     -15.737  -
10.898  -9.159  1.00  0.00      BrD ATOM   682  HA  THR   41     -16.228  -
11.725  -8.681  1.00  0.00      BrD ATOM   683  CB  THR   41     -16.133  -
10.870 -10.637  1.00  0.00      BrD ATOM   684  HB  THR   41     -15.862  -
11.812 -11.090  1.00  0.00      BrD ATOM   685  OG1 THR   41     -17.533  -
10.696 -10.775  1.00  0.00      BrD ATOM   686  HG1 THR   41     -17.988  -
11.239 -10.127  1.00  0.00      BrD ATOM   687  CG2 THR   41     -15.453  -
9.771 -11.421  1.00  0.00      BrD ATOM   688  HG21 THR   41     -14.433  -
9.669 -11.083  1.00  0.00      BrD ATOM   689  HG22 THR   41     -15.462  -
10.020 -12.472  1.00  0.00      BrD ATOM   690  HG23 THR   41     -15.979  -
8.841 -11.267  1.00  0.00      BrD ATOM   691  C   THR   41     -16.197  -
9.623  -8.467  1.00  0.00      BrD ATOM   692  O   THR   41     -17.123  -
9.656  -7.658  1.00  0.00      BrD ATOM   693  N   GLU   42     -15.573  -
8.498  -8.792  1.00  0.00      BrD ATOM   694  HN  GLU   42     -14.835  -
8.521  -9.435  1.00  0.00      BrD ATOM   695  CA  GLU   42     -15.940  -
7.236  -8.163  1.00  0.00      BrD ATOM   696  HA  GLU   42     -16.954  -
7.002  -8.454  1.00  0.00      BrD ATOM   697  CB  GLU   42     -15.013  -
6.109  -8.623  1.00  0.00      BrD ATOM   698  HB1 GLU   42     -15.239  -
5.220  -8.053  1.00  0.00      BrD ATOM   699  HB2 GLU   42     -13.993  -
6.398  -8.431  1.00  0.00      BrD ATOM   700  CG  GLU   42     -15.142  -
5.774 -10.098  1.00  0.00      BrD ATOM   701  HG1 GLU   42     -14.284  -
5.191 -10.396  1.00  0.00      BrD ATOM   702  HG2 GLU   42     -15.166  -
6.694 -10.663  1.00  0.00      BrD ATOM   703  CD  GLU   42     -16.397  -
4.982 -10.409  1.00  0.00      BrD ATOM   704  OE1 GLU   42     -17.489  -
5.589 -10.443  1.00  0.00      BrD ATOM   705  OE2 GLU   42     -16.289  -
3.756 -10.620  1.00  0.00      BrD ATOM   706  C   GLU   42     -15.881  -
7.374  -6.647  1.00  0.00      BrD ATOM   707  O   GLU   42     -16.614  -
6.703  -5.920  1.00  0.00      BrD ATOM   708  N   ALA   43     -15.024  -
8.279  -6.181  1.00  0.00      BrD ATOM   709  HN  ALA   43     -14.457  -
8.774  -6.817  1.00  0.00      BrD ATOM   710  CA  ALA   43     -14.861  -
8.509  -4.752  1.00  0.00      BrD ATOM   711  HA  ALA   43     -15.712  -
8.080  -4.245  1.00  0.00      BrD ATOM   712  CB  ALA   43     -13.609  -
7.810  -4.245  1.00  0.00      BrD ATOM   713  HB1 ALA   43     -12.893  -
7.731  -5.049  1.00  0.00      BrD ATOM   714  HB2 ALA   43     -13.866  -
6.822  -3.893  1.00  0.00      BrD ATOM   715  HB3 ALA   43     -13.180  -
8.381  -3.435  1.00  0.00      BrD ATOM   716  C   ALA   43     -14.799  -
10.002  -4.440  1.00  0.00      BrD ATOM   717  O   ALA   43     -13.721  -
10.555  -4.222  1.00  0.00      BrD ATOM   718  N   PRO   44     -15.962  -
10.676  -4.414  1.00  0.00      BrD ATOM   719  CA  PRO   44     -16.038  -
12.114  -4.129  1.00  0.00      BrD ATOM   720  HA  PRO   44     -15.511  -
12.692  -4.874  1.00  0.00      BrD ATOM   721  CB  PRO   44     -17.539  -
12.422  -4.207  1.00  0.00      BrD ATOM   722  HB1 PRO   44     -17.688  -
13.369  -4.704  1.00  0.00      BrD ATOM   723  HB2 PRO   44     -17.951  -
12.465  -3.210  1.00  0.00      BrD ATOM   724  CG  PRO   44     -18.125  -
11.298  -4.991  1.00  0.00      BrD ATOM   725  HG1 PRO   44     -18.071  -
11.518  -6.047  1.00  0.00      BrD ATOM   726  HG2 PRO   44     -19.150  -
11.137  -4.692  1.00  0.00      BrD ATOM   727  CD  PRO   44     -17.291  -
10.095  -4.665  1.00  0.00      BrD ATOM   728  HD1 PRO   44     -17.264  -
9.413  -5.500  1.00  0.00      BrD ATOM   729  HD2 PRO   44     -17.668  -
9.601  -3.783  1.00  0.00      BrD ATOM   730  C   PRO   44     -15.498  -
12.458  -2.746  1.00  0.00      BrD ATOM   731  O   PRO   44     -16.262  -
12.635  -1.797  1.00  0.00      BrD ATOM   732  N   GLY   45     -14.177  -
12.551  -2.637  1.00  0.00      BrD ATOM   733  HN  GLY   45     -13.617  -
12.400  -3.427  1.00  0.00      BrD ATOM   734  CA  GLY   45     -13.560  -
12.875  -1.365  1.00  0.00      BrD ATOM   735  HA1 GLY   45     -13.586  -
13.946  -1.228  1.00  0.00      BrD ATOM   736  HA2 GLY   45     -14.128  -
12.409  -0.573  1.00  0.00      BrD ATOM   737  C   GLY   45     -12.121  -
12.405  -1.278  1.00  0.00      BrD ATOM   738  O   GLY   45     -11.333  -
12.942  -0.499  1.00  0.00      BrD ATOM   739  N   TYR   46     -11.777  -
11.403  -2.081  1.00  0.00      BrD ATOM   740  HN  TYR   46     -12.450  -
11.015  -2.678  1.00  0.00      BrD ATOM   741  CA  TYR   46     -10.423  -
10.861  -2.089  1.00  0.00      BrD ATOM   742  HA  TYR   46     -10.271  -
10.337  -1.158  1.00  0.00      BrD ATOM   743  CB  TYR   46     -10.255  -
9.878  -3.249  1.00  0.00      BrD ATOM   744  HB1 TYR   46     -11.073  -
10.006  -3.942  1.00  0.00      BrD ATOM   745  HB2 TYR   46      -9.324  -
10.084  -3.755  1.00  0.00      BrD ATOM   746  CG  TYR   46     -10.237  -
8.431  -2.814  1.00  0.00      BrD ATOM   747  CD1 TYR   46      -9.262  -
7.558  -3.279  1.00  0.00      BrD ATOM   748  HD1 TYR   46      -8.511  -
7.926  -3.962  1.00  0.00      BrD ATOM   749  CD2 TYR   46     -11.194  -
7.938  -1.935  1.00  0.00      BrD ATOM   750  HD2 TYR   46     -11.958  -
8.605  -1.564  1.00  0.00      BrD ATOM   751  CE1 TYR   46      -9.242  -
6.235  -2.884  1.00  0.00      BrD ATOM   752  HE1 TYR   46      -8.474  -
5.572  -3.254  1.00  0.00      BrD ATOM   753  CE2 TYR   46     -11.180  -
6.617  -1.534  1.00  0.00      BrD ATOM   754  HE2 TYR   46     -11.933  -
6.253  -0.850  1.00  0.00      BrD ATOM   755  CZ  TYR   46     -10.203  -
5.769  -2.010  1.00  0.00      BrD ATOM   756  OH  TYR   46     -10.186  -
4.452  -1.612  1.00  0.00      BrD ATOM   757  HH  TYR   46      -9.895  -
4.397  -0.699  1.00  0.00      BrD ATOM   758  C   TYR   46      -9.386  -
11.975  -2.200  1.00  0.00      BrD ATOM   759  O   TYR   46      -9.727  -
13.132  -2.446  1.00  0.00      BrD ATOM   760  N   TYR   47      -8.120  -
11.618  -2.014  1.00  0.00      BrD ATOM   761  HN  TYR   47      -7.911  -
10.680  -1.823  1.00  0.00      BrD ATOM   762  CA  TYR   47      -7.033  -
12.587  -2.097  1.00  0.00      BrD ATOM   763  HA  TYR   47      -6.102  -
12.042  -2.050  1.00  0.00      BrD ATOM   764  CB  TYR   47      -7.099  -
13.345  -3.424  1.00  0.00      BrD ATOM   765  HB1 TYR   47      -7.889  -
14.080  -3.370  1.00  0.00      BrD ATOM   766  HB2 TYR   47      -6.158  -
13.848  -3.590  1.00  0.00      BrD ATOM   767  CG  TYR   47      -7.370  -
12.459  -4.619  1.00  0.00      BrD ATOM   768  CD1 TYR   47      -8.056  -
12.946  -5.725  1.00  0.00      BrD ATOM   769  HD1 TYR   47      -8.397  -
13.971  -5.722  1.00  0.00      BrD ATOM   770  CD2 TYR   47      -6.940  -
11.137  -4.644  1.00  0.00      BrD ATOM   771  HD2 TYR   47      -6.405  -
10.742  -3.792  1.00  0.00      BrD ATOM   772  CE1 TYR   47      -8.306  -
12.143  -6.821  1.00  0.00      BrD ATOM   773  HE1 TYR   47      -8.841  -
12.540  -7.671  1.00  0.00      BrD ATOM   774  CE2 TYR   47      -7.186  -
10.328  -5.738  1.00  0.00      BrD ATOM   775  HE2 TYR   47      -6.845  -
9.303  -5.739  1.00  0.00      BrD ATOM   776  CZ  TYR   47      -7.870  -
10.835  -6.823  1.00  0.00      BrD ATOM   777  OH  TYR   47      -8.117  -
10.032  -7.912  1.00  0.00      BrD ATOM   778  HH  TYR   47      -7.572  -
10.317  -8.650  1.00  0.00      BrD ATOM   779  C   TYR   47      -7.085  -
13.572  -0.933  1.00  0.00      BrD ATOM   780  O   TYR   47      -6.183  -
13.605  -0.095  1.00  0.00      BrD ATOM   781  N   GLU   48      -8.144  -
14.376  -0.887  1.00  0.00      BrD ATOM   782  HN  GLU   48      -8.830  -
14.304  -1.584  1.00  0.00      BrD ATOM   783  CA  GLU   48      -8.309  -
15.365   0.174  1.00  0.00      BrD ATOM   784  HA  GLU   48      -7.569  -
16.138   0.024  1.00  0.00      BrD ATOM   785  CB  GLU   48      -9.704  -
15.991   0.104  1.00  0.00      BrD ATOM   786  HB1 GLU   48      -9.746  -
16.827   0.786  1.00  0.00      BrD ATOM   787  HB2 GLU   48     -10.432  -
15.254   0.408  1.00  0.00      BrD ATOM   788  CG  GLU   48     -10.079  -
16.488  -1.283  1.00  0.00      BrD ATOM   789  HG1 GLU   48      -9.268  -
17.086  -1.669  1.00  0.00      BrD ATOM   790  HG2 GLU   48     -10.235  -
15.635  -1.927  1.00  0.00      BrD ATOM   791  CD  GLU   48     -11.341  -
17.328  -1.282  1.00  0.00      BrD ATOM   792  OE1 GLU   48     -12.059  -
17.320  -0.260  1.00  0.00      BrD ATOM   793  OE2 GLU   48     -11.612  -
17.994  -2.304  1.00  0.00      BrD ATOM   794  C   GLU   48      -8.091  -
14.736   1.547  1.00  0.00      BrD ATOM   795  O   GLU   48      -7.683  -
15.410   2.493  1.00  0.00      BrD ATOM   796  N   VAL   49      -8.360  -
13.439   1.645  1.00  0.00      BrD ATOM   797  HN  VAL   49      -8.682  -
12.958   0.854  1.00  0.00      BrD ATOM   798  CA  VAL   49      -8.192  -
12.712   2.899  1.00  0.00      BrD ATOM   799  HA  VAL   49      -7.919  -
13.423   3.665  1.00  0.00      BrD ATOM   800  CB  VAL   49      -9.495  -
12.010   3.332  1.00  0.00      BrD ATOM   801  HB  VAL   49      -9.555  -
11.064   2.815  1.00  0.00      BrD ATOM   802  CG1 VAL   49     -10.713  -
12.834   2.949  1.00  0.00      BrD ATOM   803  HG11 VAL   49     -11.006  -
12.591   1.937  1.00  0.00      BrD ATOM   804  HG12 VAL   49     -10.472  -
13.884   3.011  1.00  0.00      BrD ATOM   805  HG13 VAL   49     -11.526  -
12.609   3.622  1.00  0.00      BrD ATOM   806  CG2 VAL   49      -9.475  -
11.729   4.827  1.00  0.00      BrD ATOM   807  HG21 VAL   49      -9.393  -
12.661   5.367  1.00  0.00      BrD ATOM   808  HG22 VAL   49      -8.628  -
11.101   5.062  1.00  0.00      BrD ATOM   809  HG23 VAL   49     -10.387  -
11.226   5.111  1.00  0.00      BrD ATOM   810  C   VAL   49      -7.100  -
11.656   2.787  1.00  0.00      BrD ATOM   811  O   VAL   49      -6.592  -
11.167   3.797  1.00  0.00      BrD ATOM   812  N   ILE   50      -6.763  -
11.281   1.558  1.00  0.00      BrD ATOM   813  HN  ILE   50      -7.214  -
11.686   0.792  1.00  0.00      BrD ATOM   814  CA  ILE   50      -5.769  -
10.245   1.324  1.00  0.00      BrD ATOM   815  HA  ILE   50      -5.542  -
9.783   2.274  1.00  0.00      BrD ATOM   816  CB  ILE   50      -6.291
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REPLACEMENT SHEET

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 9.152   0.366  1.00  0.00      BrD ATOM   817  HB  ILE    50      -6.001
 9.428  -0.635  1.00  0.00      BrD ATOM   818  CG1 ILE    50      -7.818
 9.035   0.436  1.00  0.00      BrD ATOM   819 HG11 ILE    50      -8.256
10.011   0.288  1.00  0.00      BrD ATOM   820 HG12 ILE    50      -8.158
 8.371  -0.344  1.00  0.00      BrD ATOM   821  CG2 ILE    50      -5.644
 7.815   0.684  1.00  0.00      BrD ATOM   822 HG21 ILE    50      -5.490
 7.264  -0.233  1.00  0.00      BrD ATOM   823 HG22 ILE    50      -6.289
 7.250   1.339  1.00  0.00      BrD ATOM   824 HG23 ILE    50      -4.694
 7.981   1.169  1.00  0.00      BrD ATOM   825  CD1 ILE    50      -8.324
 8.499   1.757  1.00  0.00      BrD ATOM   826 HD11 ILE    50      -8.330
 9.293   2.489  1.00  0.00      BrD ATOM   827 HD12 ILE    50      -7.674
 7.704   2.094  1.00  0.00      BrD ATOM   828 HD13 ILE    50      -9.326
 8.116   1.631  1.00  0.00      BrD ATOM   829  C   ILE    50      -4.490
10.827   0.738  1.00  0.00       BrD ATOM   830  O   ILE    50      -4.504
11.444  -0.327  1.00  0.00      BrD ATOM   831  N   ARG    51      -3.384
10.597   1.428  1.00  0.00      BrD ATOM   832  HN  ARG    51      -3.443
10.086   2.260  1.00  0.00      BrD ATOM   833  CA  ARG    51      -2.082
11.061   0.969  1.00  0.00      BrD ATOM   834  HA  ARG    51      -2.068
12.139   1.024  1.00  0.00      BrD ATOM   835  CB  ARG    51      -0.988
10.491   1.870  1.00  0.00      BrD ATOM   836  HB1 ARG    51      -1.452
10.081   2.754  1.00  0.00      BrD ATOM   837  HB2 ARG    51      -0.478
 9.698   1.341  1.00  0.00      BrD ATOM   838  CG  ARG    51       0.048
11.516   2.301  1.00  0.00      BrD ATOM   839  HG1 ARG    51      -0.399
12.185   3.022  1.00  0.00      BrD ATOM   840  HG2 ARG    51       0.883
11.000   2.753  1.00  0.00      BrD ATOM   841  CD  ARG    51       0.552
12.329   1.120  1.00  0.00      BrD ATOM   842  HD1 ARG    51       0.514
11.713   0.233  1.00  0.00      BrD ATOM   843  HD2 ARG    51      -0.090
13.187   0.989  1.00  0.00      BrD ATOM   844  NE  ARG    51       1.923
12.789   1.318  1.00  0.00      BrD ATOM   845  HE  ARG    51       2.296
12.730   2.222  1.00  0.00      BrD ATOM   846  CZ  ARG    51       2.683
13.279   0.344  1.00  0.00      BrD ATOM   847  NH1 ARG    51       3.921
13.678   0.602  1.00  0.00      BrD ATOM   848 HH11 ARG    51       4.491
14.046  -0.132  1.00  0.00      BrD ATOM   849 HH12 ARG    51       4.284
13.610   1.532  1.00  0.00      BrD ATOM   850  NH2 ARG    51       2.206
13.371  -0.890  1.00  0.00      BrD ATOM   851 HH21 ARG    51       2.779
13.739  -1.622  1.00  0.00      BrD ATOM   852 HH22 ARG    51       1.273
13.071  -1.089  1.00  0.00      BrD ATOM   853  C   ARG    51      -1.836
10.631  -0.471  1.00  0.00      BrD ATOM   854  O   ARG    51      -1.644
11.461  -1.360  1.00  0.00      BrD ATOM   855  N   SER    52      -1.843
 9.322  -0.687  1.00  0.00      BrD ATOM   856  HN  SER    52      -2.010
 8.718   0.067  1.00  0.00      BrD ATOM   857  CA  SER    52      -1.634
 8.753  -2.012  1.00  0.00      BrD ATOM   858  HA  SER    52      -1.991
 9.462  -2.740  1.00  0.00      BrD ATOM   859  CB  SER    52      -0.145
 8.497  -2.253  1.00  0.00      BrD ATOM   860  HB1 SER    52       0.426
 8.900  -1.430  1.00  0.00      BrD ATOM   861  HB2 SER    52       0.028
 7.433  -2.325  1.00  0.00      BrD ATOM   862  OG  SER    52       0.290
 9.112  -3.453  1.00  0.00      BrD ATOM   863  HG  SER    52      -0.218
 8.768  -4.192  1.00  0.00      BrD ATOM   864  C   SER    52      -2.415
 7.450  -2.148  1.00  0.00      BrD ATOM   865  O   SER    52      -1.912
 6.382  -1.801  1.00  0.00      BrD ATOM   866  N   PRO    53      -3.675
 7.518  -2.619  1.00  0.00      BrD ATOM   867  CA  PRO    53      -4.531
 6.344  -2.745  1.00  0.00      BrD ATOM   868  HA  PRO    53      -4.993
 6.101  -1.800  1.00  0.00      BrD ATOM   869  CB  PRO    53      -5.620
 6.776  -3.738  1.00  0.00      BrD ATOM   870  HB1 PRO    53      -5.555
 6.173  -4.630  1.00  0.00      BrD ATOM   871  HB2 PRO    53      -6.590
 6.638  -3.284  1.00  0.00      BrD ATOM   872  CG  PRO    53      -5.371
 8.224  -4.043  1.00  0.00      BrD ATOM   873  HG1 PRO    53      -6.296
 8.775  -3.959  1.00  0.00      BrD ATOM   874  HG2 PRO    53      -4.969
 8.321  -5.041  1.00  0.00      BrD ATOM   875  CD  PRO    53      -4.377
 8.735  -3.034  1.00  0.00      BrD ATOM   876  HD1 PRO    53      -4.886
 9.191  -2.200  1.00  0.00      BrD ATOM   877  HD2 PRO    53      -3.704
 9.437  -3.498  1.00  0.00      BrD ATOM   878  C   PRO    53      -3.770
 5.120  -3.252  1.00  0.00      BrD ATOM   879  O   PRO    53      -3.456
 4.218  -2.475  1.00  0.00      BrD ATOM   880  N   MET    54      -3.471
 5.089  -4.553  1.00  0.00      BrD ATOM   881  HN  MET    54      -3.738
 5.838  -5.124  1.00  0.00      BrD ATOM   882  CA  MET    54      -2.734
 3.970  -5.149  1.00  0.00      BrD ATOM   883  HA  MET    54      -2.905
 3.995  -6.215  1.00  0.00      BrD ATOM   884  CB  MET    54      -1.236
 4.127  -4.877  1.00  0.00      BrD ATOM   885  HB1 MET    54      -0.936
 5.129  -5.145  1.00  0.00      BrD ATOM   886  HB2 MET    54      -1.057
 3.978  -3.822  1.00  0.00      BrD ATOM   887  CG  MET    54      -0.368
 3.147  -5.649  1.00  0.00      BrD ATOM   888  HG1 MET    54      -0.510
 2.160  -5.235  1.00  0.00      BrD ATOM   889  HG2 MET    54       0.666
 3.438  -5.537  1.00  0.00      BrD ATOM   890  SD  MET    54      -0.767
 3.101  -7.407  1.00  0.00      BrD ATOM   891  CE  MET    54      -2.176
 1.995  -7.401  1.00  0.00      BrD ATOM   892  HE1 MET    54      -2.086
 1.294  -8.214  1.00  0.00      BrD ATOM   893  HE2 MET    54      -3.085
 2.567  -7.518  1.00  0.00      BrD ATOM   894  HE3 MET    54      -2.208
 1.457  -6.465  1.00  0.00      BrD ATOM   895  C   MET    54      -3.229
 2.630  -4.602  1.00  0.00      BrD ATOM   896  O   MET    54      -2.556
 1.990  -3.795  1.00  0.00      BrD ATOM   897  N   ASP    55      -4.422
 2.232  -5.029  1.00  0.00      BrD ATOM   898  HN  ASP    55      -4.919
 2.803  -5.652  1.00  0.00      BrD ATOM   899  CA  ASP    55      -5.045
 1.005  -4.544  1.00  0.00      BrD ATOM   900  HA  ASP    55      -5.234
 1.142  -3.490  1.00  0.00      BrD ATOM   901  CB  ASP    55      -6.391
 0.793  -5.249  1.00  0.00      BrD ATOM   902  HB1 ASP    55      -6.327  -
 0.045  -5.917  1.00  0.00      BrD ATOM   903  HB2 ASP    55      -6.631
 1.679  -5.817  1.00  0.00      BrD ATOM   904  CG  ASP    55      -7.520
 0.536  -4.269  1.00  0.00      BrD ATOM   905  OD1 ASP    55      -8.426  -
 0.256  -4.602  1.00  0.00      BrD ATOM   906  OD2 ASP    55      -7.496
 1.126  -3.169  1.00  0.00      BrD ATOM   907  C   ASP    55      -4.121  -
 0.212  -4.704  1.00  0.00      BrD ATOM   908  O   ASP    55      -3.406  -
 0.570  -3.772  1.00  0.00      BrD ATOM   909  N   LEU    56      -4.142  -
 0.856  -5.870  1.00  0.00      BrD ATOM   910  HN  LEU    56      -4.715  -
 0.533  -6.586  1.00  0.00      BrD ATOM   911  CA  LEU    56      -3.306  -
 2.030  -6.111  1.00  0.00      BrD ATOM   912  HA  LEU    56      -2.301  -
 1.790  -5.810  1.00  0.00      BrD ATOM   913  CB  LEU    56      -3.804  -
 3.224  -5.292  1.00  0.00      BrD ATOM   914  HB1 LEU    56      -3.692  -
 4.115  -5.892  1.00  0.00      BrD ATOM   915  HB2 LEU    56      -4.852  -
 3.082  -5.089  1.00  0.00      BrD ATOM   916  CG  LEU    56      -3.088  -
 3.451  -3.962  1.00  0.00      BrD ATOM   917  HG  LEU    56      -3.356  -
 2.661  -3.279  1.00  0.00      BrD ATOM   918  CD1 LEU    56      -3.521  -
 4.770  -3.344  1.00  0.00      BrD ATOM   919 HD11 LEU    56      -2.809  -
 5.539  -3.606  1.00  0.00      BrD ATOM   920 HD12 LEU    56      -4.497  -
 5.040  -3.719  1.00  0.00      BrD ATOM   921 HD13 LEU    56      -3.562  -
 4.668  -2.270  1.00  0.00      BrD ATOM   922  CD2 LEU    56      -1.580  -
 3.419  -4.153  1.00  0.00      BrD ATOM   923 HD21 LEU    56      -1.352  -
 3.388  -5.209  1.00  0.00      BrD ATOM   924 HD22 LEU    56      -1.144  -
 4.306  -3.716  1.00  0.00      BrD ATOM   925 HD23 LEU    56      -1.175  -
 2.542  -3.671  1.00  0.00      BrD ATOM   926  C   LEU    56      -3.305  -
 2.400  -7.587  1.00  0.00      BrD ATOM   927  O   LEU    56      -2.271  -
 2.760  -8.150  1.00  0.00      BrD ATOM   928  N   LYS    57      -4.475  -
 2.304  -8.207  1.00  0.00      BrD ATOM   929  HN  LYS    57      -5.261  -
 2.020  -7.696  1.00  0.00      BrD ATOM   930  CA  LYS    57      -4.634  -
 2.639  -9.615  1.00  0.00      BrD ATOM   931  HA  LYS    57      -4.577  -
 3.712  -9.704  1.00  0.00      BrD ATOM   932  CB  LYS    57      -6.007  -
 2.179 -10.108  1.00  0.00      BrD ATOM   933  HB1 LYS    57      -6.765  -
 2.764  -9.608  1.00  0.00      BrD ATOM   934  HB2 LYS    57      -6.139  -
 1.139  -9.850  1.00  0.00      BrD ATOM   935  CG  LYS    57      -6.203  -
 2.328 -11.608  1.00  0.00      BrD ATOM   936  HG1 LYS    57      -5.383  -
 1.845 -12.118  1.00  0.00      BrD ATOM   937  HG2 LYS    57      -7.132  -
 1.856 -11.889  1.00  0.00      BrD ATOM   938  CD  LYS    57      -6.248  -
 3.790 -12.024  1.00  0.00      BrD ATOM   939  HD1 LYS    57      -5.259  -
 4.098 -12.327  1.00  0.00      BrD ATOM   940  HD2 LYS    57      -6.571  -
 4.383 -11.181  1.00  0.00      BrD ATOM   941  CE  LYS    57      -7.210  -
 4.011 -13.180  1.00  0.00      BrD ATOM   942  HE1 LYS    57      -7.354  -
 3.073 -13.697  1.00  0.00      BrD ATOM   943  HE2 LYS    57      -6.778  -
 4.732 -13.858  1.00  0.00      BrD ATOM   944  NZ  LYS    57      -8.532  -
 4.515 -12.715  1.00  0.00      BrD ATOM   945  HZ1 LYS    57      -8.403  -
 5.182 -11.928  1.00  0.00      BrD ATOM   946  HZ2 LYS    57      -9.022  -
 5.003 -13.492  1.00  0.00      BrD ATOM   947  HZ3 LYS    57      -9.122  -
 3.723 -12.391  1.00  0.00      BrD ATOM   948  C   LYS    57      -3.533  -
 2.015 -10.473  1.00  0.00      BrD ATOM   949  O   LYS    57      -3.222  -
 2.516 -11.553  1.00  0.00      BrD ATOM   950  N   THR    58      -2.941  -
 0.923  -9.989  1.00  0.00      BrD ATOM   951  HN  THR    58      -3.240  -
 0.552  -9.135  1.00  0.00      BrD ATOM   952  CA  THR    58      -1.901  -
 0.230 -10.742  1.00  0.00      BrD ATOM   953  HA  THR    58      -1.819  -
 0.717 -11.702  1.00  0.00      BrD ATOM   954  CB  THR    58      -2.307
 1.233 -10.967  1.00  0.00      BrD ATOM   955  HB  THR    58      -2.611
 1.660 -10.024  1.00  0.00      BrD ATOM   956  OG1 THR    58      -3.403
 1.313 -11.862  1.00  0.00      BrD ATOM   957  HG1 THR    58      -3.101
 1.133 -12.755  1.00  0.00      BrD ATOM   958  CG2 THR    58      -1.197
 2.099 -11.525  1.00  0.00      BrD ATOM   959 HG21 THR    58      -0.808
 2.734 -10.743  1.00  0.00      BrD ATOM   960 HG22 THR    58      -1.585
 2.710 -12.326  1.00  0.00      BrD ATOM   961 HG23 THR    58      -0.405
 1.469 -11.904  1.00  0.00      BrD ATOM   962  C   THR    58      -0.539  -
 0.305 -10.045  1.00  0.00      BrD ATOM   963  O   THR    58       0.499  -
 0.220 -10.701  1.00  0.00      BrD ATOM   964  N   MET    59      -0.537  -
 0.445  -8.721  1.00  0.00      BrD ATOM   965  HN  MET    59      -1.388  -
 0.503  -8.238  1.00  0.00      BrD ATOM   966  CA  MET    59       0.718  -
 0.505  -7.972  1.00  0.00      BrD ATOM   967  HA  MET    59       1.401
 0.191  -8.436  1.00  0.00      BrD ATOM   968  CB  MET    59       0.499  -
 0.070  -6.513  1.00  0.00      BrD ATOM   969  HB1 MET    59       1.430
 0.316  -6.125  1.00  0.00      BrD ATOM   970  HB2 MET    59      -0.238
 0.717  -6.498  1.00  0.00      BrD ATOM   971  CG  MET    59       0.022  -
 1.176  -5.583  1.00  0.00      BrD ATOM   972  HG1 MET    59      -0.822  -
 0.811  -5.017  1.00  0.00      BrD ATOM   973  HG2 MET    59      -0.286  -
 2.022  -6.180  1.00  0.00      BrD ATOM   974  SD  MET    59       1.300  -
 1.715  -4.431  1.00  0.00      BrD ATOM   975  CE  MET    59       1.463  -
 0.259  -3.400  1.00  0.00      BrD ATOM   976  HE1 MET    59       0.629  -
 0.205  -2.715  1.00  0.00      BrD ATOM   977  HE2 MET    59       1.474
 0.624  -4.022  1.00  0.00      BrD ATOM   978  HE3 MET    59       2.386  -
 0.316  -2.841  1.00  0.00      BrD ATOM   979  C   MET    59       1.345  -
 1.901  -8.036  1.00  0.00      BrD ATOM   980  O   MET    59       2.535  -
 2.067  -7.767  1.00  0.00      BrD ATOM   981  N   SER    60       0.542  -
 2.898  -8.392  1.00  0.00      BrD ATOM   982  HN  SER    60      -0.399  -
 2.710  -8.590  1.00  0.00      BrD ATOM   983  CA  SER    60       1.025  -
 4.271  -8.478  1.00  0.00      BrD ATOM   984  HA  SER    60       1.685  -
 4.442  -7.640  1.00  0.00      BrD ATOM   985  CB  SER    60      -0.147  -
 5.250  -8.396  1.00  0.00      BrD ATOM   986  HB1 SER    60      -0.610  -
 5.171  -7.424  1.00  0.00      BrD ATOM   987  HB2 SER    60      -0.871  -
 5.006  -9.159  1.00  0.00      BrD ATOM   988  OG  SER    60       0.286  -
 6.585  -8.588  1.00  0.00      BrD ATOM   989  HG  SER    60      -0.145  -
 6.953  -9.363  1.00  0.00      BrD ATOM   990  C   SER    60       1.803  -
 4.503  -9.770  1.00  0.00      BrD ATOM   991  O   SER    60       2.636  -
 5.405  -9.850  1.00  0.00      BrD ATOM   992  N   GLU    61       1.519  -
 3.690 -10.782  1.00  0.00      BrD ATOM   993  HN  GLU    61       0.839  -
 2.995 -10.661  1.00  0.00      BrD ATOM   994  CA  GLU    61       2.182  -
 3.820 -12.075  1.00  0.00      BrD ATOM   995  HA  GLU    61       2.295  -
 4.874 -12.283  1.00  0.00      BrD ATOM   996  CB  GLU    61       1.326  -
 3.187 -13.174  1.00  0.00      BrD ATOM   997  HB1 GLU    61       1.820  -
 3.324 -14.125  1.00  0.00      BrD ATOM   998  HB2 GLU    61       1.232  -
 2.129 -12.977  1.00  0.00      BrD ATOM   999  CG  GLU    61      -0.071  -
 3.779 -13.274  1.00  0.00      BrD ATOM  1000  HG1 GLU    61      -0.494  -
 3.836 -12.282  1.00  0.00      BrD ATOM  1001  HG2 GLU    61      -0.679  -
 3.132 -13.889  1.00  0.00      BrD ATOM  1002  CD  GLU    61      -0.073  -
 5.167 -13.883  1.00  0.00      BrD ATOM  1003  OE1 GLU    61      -1.024  -
 5.488 -14.627  1.00  0.00      BrD ATOM  1004  OE2 GLU    61       0.876  -
 5.934 -13.617  1.00  0.00      BrD ATOM  1005  C   GLU    61       3.565  -
 3.174 -12.060  1.00  0.00      BrD ATOM  1006  O   GLU    61       4.466  -
 3.601 -12.782  1.00  0.00      BrD ATOM  1007  N   ARG    62       3.726  -
 2.137 -11.244  1.00  0.00      BrD ATOM  1008  HN  ARG    62       2.971  -
 1.836 -10.697  1.00  0.00      BrD ATOM  1009  CA  ARG    62       4.999  -
 1.428 -11.155  1.00  0.00      BrD ATOM  1010  HA  ARG    62       5.352  -
 1.262 -12.162  1.00  0.00      BrD ATOM  1011  CB  ARG    62       4.807  -
 0.075 -10.468  1.00  0.00      BrD ATOM  1012  HB1 ARG    62       5.753
 0.241 -10.052  1.00  0.00      BrD ATOM  1013  HB2 ARG    62       4.091  -
 0.187  -9.668  1.00  0.00      BrD ATOM  1014  CG  ARG    62       4.312
 1.018 -11.404  1.00  0.00      BrD ATOM  1015  HG1 ARG    62       4.852
 1.928 -11.195  1.00  0.00      BrD ATOM  1016  HG2 ARG    62       4.494
 0.714 -12.424  1.00  0.00      BrD ATOM  1017  CD  ARG    62       2.826
 1.278 -11.225  1.00  0.00      BrD ATOM  1018  HD1 ARG    62       2.484
 0.738 -10.356  1.00  0.00      BrD ATOM  1019  HD2 ARG    62       2.675
 2.336 -11.072  1.00  0.00      BrD ATOM  1020  NE  ARG    62       2.052
 0.851 -12.387  1.00  0.00      BrD ATOM  1021  HE  ARG    62       1.621  -
 0.028 -12.346  1.00  0.00      BrD ATOM  1022  CZ  ARG    62       1.903
 1.585 -13.485  1.00  0.00      BrD ATOM  1023  NH1 ARG    62       1.183
 1.125 -14.498  1.00  0.00      BrD ATOM  1024 HH11 ARG    62       1.072
 1.678 -15.324  1.00  0.00      BrD ATOM  1025 HH12 ARG    62       0.752
 0.226 -14.437  1.00  0.00      BrD ATOM  1026  NH2 ARG    62       2.473
 2.780 -13.571  1.00  0.00      BrD ATOM  1027 HH21 ARG    62       2.359
 3.329 -14.399  1.00  0.00      BrD ATOM  1028 HH22 ARG    62       3.018
 3.130 -12.809  1.00  0.00      BrD ATOM  1029  C   ARG    62       6.040  -
 2.255 -10.405  1.00  0.00      BrD ATOM  1030  O   ARG    62       7.101  -
 2.569 -10.945  1.00  0.00      BrD ATOM  1031  N   LEU    63       5.734  -
 2.606  -9.158  1.00  0.00      BrD ATOM  1032  HN  LEU    63       4.875  -
 2.326  -8.780  1.00  0.00      BrD ATOM  1033  CA  LEU    63       6.651  -
 3.396  -8.339  1.00  0.00      BrD ATOM  1034  HA  LEU    63       7.496  -
 2.771  -8.093  1.00  0.00      BrD ATOM  1035  CB  LEU    63       5.962  -
 3.840  -7.043  1.00  0.00      BrD ATOM  1036  HB1 LEU    63       5.009  -
 4.277  -7.302  1.00  0.00      BrD ATOM  1037  HB2 LEU    63       5.780  -
 2.962  -6.442  1.00  0.00      BrD ATOM  1038  CG  LEU    63       6.736  -
 4.857  -6.186  1.00  0.00      BrD ATOM  1039  HG  LEU    63       6.429  -
 4.754  -5.156  1.00  0.00      BrD ATOM  1040  CD1 LEU    63       8.237  -
 4.605  -6.247  1.00  0.00      BrD ATOM  1041 HD11 LEU    63       8.420  -
 3.584  -6.547  1.00  0.00      BrD ATOM  1042 HD12 LEU    63       8.685  -
 5.277  -6.965  1.00  0.00      BrD ATOM  1043 HD13 LEU    63       8.671  -
 4.779  -5.273  1.00  0.00      BrD ATOM  1044  CD2 LEU    63       6.414  -
 6.277  -6.627  1.00  0.00      BrD ATOM  1045 HD21 LEU    63       7.332  -
 6.804  -6.842  1.00  0.00      BrD ATOM  1046 HD22 LEU    63       5.798  -
 6.248  -7.514  1.00  0.00      BrD ATOM  1047 HD23 LEU    63       5.883  -
 6.787  -5.836  1.00  0.00      BrD ATOM  1048  C   LEU    63       7.150  -
 4.618  -9.103  1.00  0.00      BrD ATOM  1049  O   LEU    63       8.354  -
 4.853  -9.203  1.00  0.00      BrD ATOM  1050  N   LYS    64       6.214  -
 5.390  -9.643  1.00  0.00      BrD ATOM  1051  HN  LYS    64       5.271  -
 5.150  -9.525  1.00  0.00      BrD ATOM  1052  CA  LYS    64       6.551  -
 6.592 -10.397  1.00  0.00      BrD ATOM  1053  HA  LYS    64       6.929  -
 7.325  -9.699  1.00  0.00      BrD ATOM  1054  CB  LYS    64       5.303  -
 7.152 -11.082  1.00  0.00      BrD ATOM  1055  HB1 LYS    64       4.649  -
 6.332 -11.340  1.00  0.00      BrD ATOM  1056  HB2 LYS    64       5.602  -
 7.661 -11.987  1.00  0.00      BrD ATOM  1057  CG  LYS    64       4.523  -
 8.131 -10.221  1.00  0.00      BrD ATOM  1058  HG1 LYS    64       3.533  -
 7.734 -10.047  1.00  0.00      BrD ATOM  1059  HG2 LYS    64       5.035  -
 8.254  -9.278  1.00  0.00      BrD ATOM  1060  CD  LYS    64       4.398  -
 9.488 -10.894  1.00  0.00      BrD ATOM  1061  HD1 LYS    64       3.363  -
 9.798 -10.870  1.00  0.00      BrD ATOM  1062  HD2 LYS    64       4.726  -
 9.402 -11.920  1.00  0.00      BrD ATOM  1063  CE  LYS    64       5.243  -
10.538 -10.192  1.00  0.00      BrD ATOM  1064  HE1 LYS    64       5.904  -
10.043  -9.496  1.00  0.00      BrD ATOM  1065  HE2 LYS    64       4.589  -
11.207  -9.653  1.00  0.00      BrD ATOM  1066  NZ  LYS    64       6.060  -
11.330 -11.154  1.00  0.00      BrD ATOM  1067  HZ1 LYS    64       6.712  -
11.955 -10.638  1.00  0.00      BrD ATOM  1068  HZ2 LYS    64       6.615  -
10.693 -11.761  1.00  0.00      BrD ATOM  1069  HZ3 LYS    64       5.441  -
11.911 -11.754  1.00  0.00      BrD ATOM  1070  C   LYS    64       7.629  -
 6.305 -11.439  1.00  0.00      BrD ATOM  1071  O   LYS    64       8.376  -
 7.200 -11.834  1.00  0.00      BrD ATOM  1072  N   ASN    65       7.705  -
 5.052 -11.880  1.00  0.00      BrD ATOM  1073  HN  ASN    65       7.080  -
 4.383 -11.531  1.00  0.00      BrD ATOM  1074  CA  ASN    65       8.688  -
 4.657 -12.883  1.00  0.00      BrD ATOM  1075  HA  ASN    65       9.212  -
 5.547 -13.198  1.00  0.00      BrD ATOM  1076  CB  ASN    65       7.989  -
 4.034 -14.092  1.00  0.00      BrD ATOM  1077  HB1 ASN    65       8.680  -
 3.376 -14.600  1.00  0.00      BrD ATOM  1078  HB2 ASN    65       7.137  -
 3.463 -13.754  1.00  0.00      BrD ATOM  1079  CG  ASN    65       7.506  -
 5.076 -15.081  1.00  0.00      BrD ATOM  1080  OD1 ASN    65       8.177  -
 6.080 -15.320  1.00  0.00      BrD ATOM  1081  ND2 ASN    65       6.334  -
 4.844 -15.660  1.00  0.00      BrD ATOM  1082 HD21 ASN    65       5.854  -
 4.024 -15.421  1.00  0.00      BrD ATOM  1083 HD22 ASN    65       5.997  -
 5.502 -16.303  1.00  0.00      BrD ATOM  1084  C   ASN    65       9.703  -
 3.677 -12.308  1.00  0.00      BrD ATOM  1085  O   ASN    65      10.237  -
 2.829 -13.023  1.00  0.00      BrD ATOM  1086  N   ARG    66       9.973  -
 3.804 -11.014  1.00  0.00      BrD ATOM  1087  HN  ARG    66       9.523  -
 4.505 -10.498  1.00  0.00      BrD ATOM  1088  CA  ARG    66      10.942  -
 2.943 -10.346  1.00  0.00      BrD ATOM  1089  HA  ARG    66      10.826  -
 3.082  -9.281  1.00  0.00      BrD ATOM  1090  CB  ARG    66      12.357  -
 3.347 -10.739  1.00  0.00      BrD ATOM  1091  HB1 ARG    66      12.323  -
 3.875 -11.680  1.00  0.00      BrD ATOM  1092  HB2 ARG    66      12.959  -
 2.458 -10.854  1.00  0.00      BrD ATOM  1093  CG  ARG    66      13.018  -
 4.243  -9.713  1.00  0.00      BrD ATOM  1094  HG1 ARG    66      13.744  -
 3.666  -9.163  1.00  0.00      BrD ATOM  1095  HG2 ARG    66      12.262  -
 4.613  -9.038  1.00  0.00      BrD ATOM  1096  CD  ARG    66      13.710  -
 5.423 -10.368  1.00  0.00      BrD ATOM  1097  HD1 ARG    66      13.453  -
 5.439 -11.416  1.00  0.00      BrD ATOM  1098  HD2 ARG    66      13.358  -
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6.329	-9.898	1.00	0.00	BrD ATOM	1099	NE	ARG	66	15.162 -
5.351	-10.237	1.00	0.00	BrD ATOM	1100	HE	ARG	66	15.688 -
5.255	-11.059	1.00	0.00	BrD ATOM	1101	CZ	ARG	66	15.801 -
5.407	-9.074	1.00	0.00	BrD ATOM	1102	NH1	ARG	66	15.117 -
5.536	-7.945	1.00	0.00	BrD ATOM	1103	HH11	ARG	66	15.599 -
5.578	-7.070	1.00	0.00	BrD ATOM	1104	HH12	ARG	66	14.118 -
5.591	-7.969	1.00	0.00	BrD ATOM	1105	NH2	ARG	66	17.125 -
5.334	-9.037	1.00	0.00	BrD ATOM	1106	HH21	ARG	66	17.604 -
5.377	-8.161	1.00	0.00	BrD ATOM	1107	HH22	ARG	66	17.643 -
5.237	-9.887	1.00	0.00	BrD ATOM	1108	C	ARG	66	10.708 -
1.474	-10.682	1.00	0.00	BrD ATOM	1109	O	ARG	66	11.654 -
0.705	-10.850	1.00	0.00	BrD ATOM	1110	N	TYR	67	9.441 -
1.097	-10.783	1.00	0.00	BrD ATOM	1111	HN	TYR	67	8.736 -
1.759	-10.633	1.00	0.00	BrD ATOM	1112	CA	TYR	67	9.075
0.280	-11.094	1.00	0.00	BrD ATOM	1113	HA	TYR	67	9.952
0.780	-11.472	1.00	0.00	BrD ATOM	1114	CB	TYR	67	7.982
0.309	-12.164	1.00	0.00	BrD ATOM	1115	HB1	TYR	67	7.062 -
0.061	-11.738	1.00	0.00	BrD ATOM	1116	HB2	TYR	67	8.276 -
0.330	-12.984	1.00	0.00	BrD ATOM	1117	CG	TYR	67	7.713
1.687	-12.723	1.00	0.00	BrD ATOM	1118	CD1	TYR	67	7.042
2.639	-11.970	1.00	0.00	BrD ATOM	1119	HD1	TYR	67	6.718
2.385	-10.973	1.00	0.00	BrD ATOM	1120	CD2	TYR	67	8.122
2.032	-14.005	1.00	0.00	BrD ATOM	1121	HD2	TYR	67	8.645
1.301	-14.604	1.00	0.00	BrD ATOM	1122	CE1	TYR	67	6.787
3.899	-12.475	1.00	0.00	BrD ATOM	1123	HE1	TYR	67	6.261
4.625	-11.872	1.00	0.00	BrD ATOM	1124	CE2	TYR	67	7.872
3.291	-14.518	1.00	0.00	BrD ATOM	1125	HE2	TYR	67	8.198
3.541	-15.516	1.00	0.00	BrD ATOM	1126	CZ	TYR	67	7.204
4.220	-13.749	1.00	0.00	BrD ATOM	1127	OH	TYR	67	6.953
5.475	-14.256	1.00	0.00	BrD ATOM	1128	HH	TYR	67	7.446
6.127	-13.753	1.00	0.00	BrD ATOM	1129	C	TYR	67	8.606
1.006	-9.840	1.00	0.00	BrD ATOM	1130	O	TYR	67	8.910
2.181	-9.639	1.00	0.00	BrD ATOM	1131	N	TYR	68	7.880
0.291	-8.990	1.00	0.00	BrD ATOM	1132	HN	TYR	68	7.686 -
0.647	-9.197	1.00	0.00	BrD ATOM	1133	CA	TYR	68	7.401
0.855	-7.736	1.00	0.00	BrD ATOM	1134	HA	TYR	68	7.528
1.924	-7.788	1.00	0.00	BrD ATOM	1135	CB	TYR	68	5.918
0.531	-7.538	1.00	0.00	BrD ATOM	1136	HB1	TYR	68	5.646 -
0.286	-8.188	1.00	0.00	BrD ATOM	1137	HB2	TYR	68	5.758
0.234	-6.512	1.00	0.00	BrD ATOM	1138	CG	TYR	68	4.987
1.689	-7.833	1.00	0.00	BrD ATOM	1139	CD1	TYR	68	5.378
2.734	-8.664	1.00	0.00	BrD ATOM	1140	HD1	TYR	68	6.364
2.717	-9.101	1.00	0.00	BrD ATOM	1141	CD2	TYR	68	3.712
1.732	-7.283	1.00	0.00	BrD ATOM	1142	HD2	TYR	68	3.392
0.927	-6.638	1.00	0.00	BrD ATOM	1143	CE1	TYR	68	4.526
3.788	-8.933	1.00	0.00	BrD ATOM	1144	HE1	TYR	68	4.849
4.591	-9.579	1.00	0.00	BrD ATOM	1145	CE2	TYR	68	2.855
2.782	-7.549	1.00	0.00	BrD ATOM	1146	HE2	TYR	68	1.868
2.797	-7.110	1.00	0.00	BrD ATOM	1147	CZ	TYR	68	3.267
3.807	-8.374	1.00	0.00	BrD ATOM	1148	OH	TYR	68	2.416
4.855	-8.639	1.00	0.00	BrD ATOM	1149	HH	TYR	68	2.457
5.490	-7.920	1.00	0.00	BrD ATOM	1150	C	TYR	68	8.206
0.327	-6.548	1.00	0.00	BrD ATOM	1151	O	TYR	68	8.001
0.759	-5.416	1.00	0.00	BrD ATOM	1152	N	VAL	69	9.149 -
0.579	-6.816	1.00	0.00	BrD ATOM	1153	HN	VAL	69	9.268 -
0.888	-7.735	1.00	0.00	BrD ATOM	1154	CA	VAL	69	9.977 -
1.170	-5.769	1.00	0.00	BrD ATOM	1155	HA	VAL	69	9.397 -
1.941	-5.285	1.00	0.00	BrD ATOM	1156	CB	VAL	69	11.232 -
1.825	-6.366	1.00	0.00	BrD ATOM	1157	HB	VAL	69	10.922 -
2.537	-7.117	1.00	0.00	BrD ATOM	1158	CG1	VAL	69	12.107 -
0.778	-7.032	1.00	0.00	BrD ATOM	1159	HG11	VAL	69	11.701 -
0.536	-8.003	1.00	0.00	BrD ATOM	1160	HG12	VAL	69	13.108 -
1.165	-7.146	1.00	0.00	BrD ATOM	1161	HG13	VAL	69	12.131
0.111	-6.420	1.00	0.00	BrD ATOM	1162	CG2	VAL	69	12.001 -
2.572	-5.291	1.00	0.00	BrD ATOM	1163	HG21	VAL	69	11.389 -
3.370	-4.899	1.00	0.00	BrD ATOM	1164	HG22	VAL	69	12.256 -
1.889	-4.494	1.00	0.00	BrD ATOM	1165	HG23	VAL	69	12.904 -
2.985	-5.716	1.00	0.00	BrD ATOM	1166	C	VAL	69	10.409 -
0.149	-4.717	1.00	0.00	BrD ATOM	1167	O	VAL	69	10.642 -
0.506	-3.565	1.00	0.00	BrD ATOM	1168	N	SER	70	10.508
1.123	-5.110	1.00	0.00	BrD ATOM	1169	HN	SER	70	10.321
1.350	-6.044	1.00	0.00	BrD ATOM	1170	CA	SER	70	10.909
2.190	-4.189	1.00	0.00	BrD ATOM	1171	HA	SER	70	11.983
2.146	-4.081	1.00	0.00	BrD ATOM	1172	CB	SER	70	10.525
3.552	-4.767	1.00	0.00	BrD ATOM	1173	HB1	SER	70	11.246
3.838	-5.518	1.00	0.00	BrD ATOM	1174	HB2	SER	70	9.546
3.483	-5.216	1.00	0.00	BrD ATOM	1175	OG	SER	70	10.498
4.547	-3.758	1.00	0.00	BrD ATOM	1176	HG	SER	70	10.908
5.349	-4.088	1.00	0.00	BrD ATOM	1177	C	SER	70	10.268
2.011	-2.810	1.00	0.00	BrD ATOM	1178	O	SER	70	9.252
1.330	-2.674	1.00	0.00	BrD ATOM	1179	N	LYS	71	10.881
2.605	-1.791	1.00	0.00	BrD ATOM	1180	HN	LYS	71	11.700
3.118	-1.958	1.00	0.00	BrD ATOM	1181	CA	LYS	71	10.393
2.470	-0.422	1.00	0.00	BrD ATOM	1182	HA	LYS	71	10.268
1.415	-0.226	1.00	0.00	BrD ATOM	1183	CB	LYS	71	11.419
3.036	0.564	1.00	0.00	BrD ATOM	1184	HB1	LYS	71	10.915
3.287	1.485	1.00	0.00	BrD ATOM	1185	HB2	LYS	71	11.848
3.933	0.142	1.00	0.00	BrD ATOM	1186	CG	LYS	71	12.550
2.074	0.888	1.00	0.00	BrD ATOM	1187	HG1	LYS	71	13.359
2.237	0.191	1.00	0.00	BrD ATOM	1188	HG2	LYS	71	12.188
1.061	0.791	1.00	0.00	BrD ATOM	1189	CD	LYS	71	13.069
2.279	2.302	1.00	0.00	BrD ATOM	1190	HD1	LYS	71	12.295
2.001	3.002	1.00	0.00	BrD ATOM	1191	HD2	LYS	71	13.936
1.652	2.452	1.00	0.00	BrD ATOM	1192	CE	LYS	71	13.460
3.727	2.548	1.00	0.00	BrD ATOM	1193	HE1	LYS	71	14.024
4.084	1.699	1.00	0.00	BrD ATOM	1194	HE2	LYS	71	12.561
4.316	2.655	1.00	0.00	BrD ATOM	1195	NZ	LYS	71	14.287
3.879	3.777	1.00	0.00	BrD ATOM	1196	HZ1	LYS	71	13.870
3.334	4.558	1.00	0.00	BrD ATOM	1197	HZ2	LYS	71	14.334
4.880	4.055	1.00	0.00	BrD ATOM	1198	HZ3	LYS	71	15.252
3.533	3.604	1.00	0.00	BrD ATOM	1199	C	LYS	71	9.041
3.160	-0.231	1.00	0.00	BrD ATOM	1200	O	LYS	71	7.992
2.529	-0.362	1.00	0.00	BrD ATOM	1201	N	LYS	72	9.070
4.447	0.109	1.00	0.00	BrD ATOM	1202	HN	LYS	72	9.933
4.898	0.211	1.00	0.00	BrD ATOM	1203	CA	LYS	72	7.844
5.201	0.351	1.00	0.00	BrD ATOM	1204	HA	LYS	72	7.396
4.818	1.255	1.00	0.00	BrD ATOM	1205	CB	LYS	72	8.167
6.684	0.547	1.00	0.00	BrD ATOM	1206	HB1	LYS	72	7.249
7.216	0.752	1.00	0.00	BrD ATOM	1207	HB2	LYS	72	8.601
7.070	-0.364	1.00	0.00	BrD ATOM	1208	CG	LYS	72	9.136
6.950	1.687	1.00	0.00	BrD ATOM	1209	HG1	LYS	72	9.870
6.158	1.715	1.00	0.00	BrD ATOM	1210	HG2	LYS	72	9.629
7.895	1.515	1.00	0.00	BrD ATOM	1211	CD	LYS	72	8.419
7.004	3.027	1.00	0.00	BrD ATOM	1212	HD1	LYS	72	7.833
6.104	3.147	1.00	0.00	BrD ATOM	1213	HD2	LYS	72	9.155
7.065	3.816	1.00	0.00	BrD ATOM	1214	CE	LYS	72	7.497
8.208	3.117	1.00	0.00	BrD ATOM	1215	HE1	LYS	72	7.708
8.869	2.288	1.00	0.00	BrD ATOM	1216	HE2	LYS	72	6.474
7.868	3.054	1.00	0.00	BrD ATOM	1217	NZ	LYS	72	7.681
8.956	4.391	1.00	0.00	BrD ATOM	1218	HZ1	LYS	72	8.150
8.352	5.096	1.00	0.00	BrD ATOM	1219	HZ2	LYS	72	6.758
9.256	4.766	1.00	0.00	BrD ATOM	1220	HZ3	LYS	72	8.267
9.800	4.229	1.00	0.00	BrD ATOM	1221	C	LYS	72	6.852
5.034	-0.794	1.00	0.00	BrD ATOM	1222	O	LYS	72	5.641
5.001	-0.578	1.00	0.00	BrD ATOM	1223	N	LEU	73	7.370
4.933	-2.011	1.00	0.00	BrD ATOM	1224	HN	LEU	73	8.343
4.972	-2.121	1.00	0.00	BrD ATOM	1225	CA	LEU	73	6.528
4.786	-3.191	1.00	0.00	BrD ATOM	1226	HA	LEU	73	5.982
5.708	-3.323	1.00	0.00	BrD ATOM	1227	CB	LEU	73	7.394
4.539	-4.427	1.00	0.00	BrD ATOM	1228	HB1	LEU	73	7.447
3.474	-4.596	1.00	0.00	BrD ATOM	1229	HB2	LEU	73	8.389
4.903	-4.219	1.00	0.00	BrD ATOM	1230	CG	LEU	73	6.896
5.206	-5.711	1.00	0.00	BrD ATOM	1231	HG	LEU	73	5.937
4.787	-5.978	1.00	0.00	BrD ATOM	1232	CD1	LEU	73	7.860
4.943	-6.857	1.00	0.00	BrD ATOM	1233	HD11	LEU	73	8.166
3.907	-6.840	1.00	0.00	BrD ATOM	1234	HD12	LEU	73	8.729
5.576	-6.750	1.00	0.00	BrD ATOM	1235	HD13	LEU	73	7.372
5.158	-7.796	1.00	0.00	BrD ATOM	1236	CD2	LEU	73	6.710
6.701	-5.498	1.00	0.00	BrD ATOM	1237	HD21	LEU	73	7.104
6.979	-4.531	1.00	0.00	BrD ATOM	1238	HD22	LEU	73	5.659
6.943	-5.541	1.00	0.00	BrD ATOM	1239	HD23	LEU	73	7.237
7.243	-6.270	1.00	0.00	BrD ATOM	1240	C	LEU	73	5.528
3.645	-3.025	1.00	0.00	BrD ATOM	1241	O	LEU	73	4.318
3.860	-3.061	1.00	0.00	BrD ATOM	1242	N	PHE	74	6.041
2.432	-2.860	1.00	0.00	BrD ATOM	1243	HN	PHE	74	7.014
2.322	-2.855	1.00	0.00	BrD ATOM	1244	CA	PHE	74	5.192
1.253	-2.721	1.00	0.00	BrD ATOM	1245	HA	PHE	74	4.364
1.359	-3.406	1.00	0.00	BrD ATOM	1246	CB	PHE	74	5.984 -
0.003	-3.084	1.00	0.00	BrD ATOM	1247	HB1	PHE	74	6.730 -
0.181	-2.324	1.00	0.00	BrD ATOM	1248	HB2	PHE	74	6.473
0.154	-4.030	1.00	0.00	BrD ATOM	1249	CG	PHE	74	5.141 -
1.240	-3.202	1.00	0.00	BrD ATOM	1250	CD1	PHE	74	4.952 -
1.851	-4.431	1.00	0.00	BrD ATOM	1251	HD1	PHE	74	5.412 -
1.425	-5.311	1.00	0.00	BrD ATOM	1252	CD2	PHE	74	4.546 -
1.797	-2.082	1.00	0.00	BrD ATOM	1253	HD2	PHE	74	4.691 -
1.332	-1.118	1.00	0.00	BrD ATOM	1254	CE1	PHE	74	4.181 -
2.993	-4.542	1.00	0.00	BrD ATOM	1255	HE1	PHE	74	4.039 -
3.458	-5.506	1.00	0.00	BrD ATOM	1256	CE2	PHE	74	3.780 -
2.942	-2.186	1.00	0.00	BrD ATOM	1257	HE2	PHE	74	3.315 -
3.362	-1.304	1.00	0.00	BrD ATOM	1258	CZ	PHE	74	3.593 -
3.538	-3.418	1.00	0.00	BrD ATOM	1259	HZ	PHE	74	2.989 -
4.430	-3.502	1.00	0.00	BrD ATOM	1260	C	PHE	74	4.643
1.116	-1.305	1.00	0.00	BrD ATOM	1261	O	PHE	74	3.503
0.694	-1.111	1.00	0.00	BrD ATOM	1262	N	MET	75	5.466
1.447	-0.318	1.00	0.00	BrD ATOM	1263	HN	MET	75	6.372
1.755	-0.532	1.00	0.00	BrD ATOM	1264	CA	MET	75	5.072
1.308	1.078	1.00	0.00	BrD ATOM	1265	HA	MET	75	4.603
0.339	1.187	1.00	0.00	BrD ATOM	1266	CB	MET	75	6.300
1.365	1.984	1.00	0.00	BrD ATOM	1267	HB1	MET	75	6.001
1.734	2.954	1.00	0.00	BrD ATOM	1268	HB2	MET	75	7.021
2.043	1.554	1.00	0.00	BrD ATOM	1269	CG	MET	75	6.966
0.014	2.171	1.00	0.00	BrD ATOM	1270	HG1	MET	75	7.524
0.029	3.092	1.00	0.00	BrD ATOM	1271	HG2	MET	75	6.200 -
0.744	2.231	1.00	0.00	BrD ATOM	1272	SD	MET	75	8.086 -
0.403	0.822	1.00	0.00	BrD ATOM	1273	CE	MET	75	8.173 -
2.182	1.002	1.00	0.00	BrD ATOM	1274	HE1	MET	75	7.211 -
2.557	1.319	1.00	0.00	BrD ATOM	1275	HE2	MET	75	8.917 -
2.435	1.741	1.00	0.00	BrD ATOM	1276	HE3	MET	75	8.438 -
2.630	0.054	1.00	0.00	BrD ATOM	1277	C	MET	75	4.067
2.374	1.496	1.00	0.00	BrD ATOM	1278	O	MET	75	2.939
2.052	1.866	1.00	0.00	BrD ATOM	1279	N	ALA	76	4.472
3.642	1.462	1.00	0.00	BrD ATOM	1280	HN	ALA	76	5.380
3.854	1.163	1.00	0.00	BrD ATOM	1281	CA	ALA	76	3.573
4.722	1.861	1.00	0.00	BrD ATOM	1282	HA	ALA	76	3.409
4.638	2.922	1.00	0.00	BrD ATOM	1283	CB	ALA	76	4.182
6.083	1.595	1.00	0.00	BrD ATOM	1284	HB1	ALA	76	4.234
6.252	0.531	1.00	0.00	BrD ATOM	1285	HB2	ALA	76	5.172
6.125	2.021	1.00	0.00	BrD ATOM	1286	HB3	ALA	76	3.558
6.842	2.049	1.00	0.00	BrD ATOM	1287	C	ALA	76	2.240
4.601	1.147	1.00	0.00	BrD ATOM	1288	O	ALA	76	1.211
5.026	1.666	1.00	0.00	BrD ATOM	1289	N	ASP	77	2.270
4.014	-0.044	1.00	0.00	BrD ATOM	1290	HN	ASP	77	3.124
3.685	-0.394	1.00	0.00	BrD ATOM	1291	CA	ASP	77	1.058
3.804	-0.818	1.00	0.00	BrD ATOM	1292	HA	ASP	77	0.460
4.701	-0.750	1.00	0.00	BrD ATOM	1293	CB	ASP	77	1.392
3.534	-2.283	1.00	0.00	BrD ATOM	1294	HB1	ASP	77	2.196
2.817	-2.334	1.00	0.00	BrD ATOM	1295	HB2	ASP	77	0.521
3.128	-2.776	1.00	0.00	BrD ATOM	1296	CG	ASP	77	1.817
4.790	-3.018	1.00	0.00	BrD ATOM	1297	OD1	ASP	77	1.353
4.995	-4.159	1.00	0.00	BrD ATOM	1298	OD2	ASP	77	2.613
5.569	-2.453	1.00	0.00	BrD ATOM	1299	C	ASP	77	0.268
2.641	-0.243	1.00	0.00	BrD ATOM	1300	O	ASP	77	-0.950
2.717	-0.113	1.00	0.00	BrD ATOM	1301	N	LEU	78	0.970
1.569	0.119	1.00	0.00	BrD ATOM	1302	HN	LEU	78	1.944
1.570	0.006	1.00	0.00	BrD ATOM	1303	CA	LEU	78	0.319
0.411	0.711	1.00	0.00	BrD ATOM	1304	HA	LEU	78	-0.493
0.122	0.060	1.00	0.00	BrD ATOM	1305	CB	LEU	78	1.280 -
0.761	0.849	1.00	0.00	BrD ATOM	1306	HB1	LEU	78	2.212 -
0.516	0.358	1.00	0.00	BrD ATOM	1307	HB2	LEU	78	1.480 -
0.922	1.900	1.00	0.00	BrD ATOM	1308	CG	LEU	78	0.736 -
2.052	0.259	1.00	0.00	BrD ATOM	1309	HG	LEU	78	-0.338 -
2.023	0.293	1.00	0.00	BrD ATOM	1310	CD1	LEU	78	1.143 -
2.189	-1.193	1.00	0.00	BrD ATOM	1311	HD11	LEU	78	1.413 -
3.213	-1.398	1.00	0.00	BrD ATOM	1312	HD12	LEU	78	1.985 -
1.543	-1.388	1.00	0.00	BrD ATOM	1313	HD13	LEU	78	0.317 -
1.901	-1.825	1.00	0.00	BrD ATOM	1314	CD2	LEU	78	1.189 -
3.236	1.078	1.00	0.00	BrD ATOM	1315	HD21	LEU	78	2.264 -
3.266	1.099	1.00	0.00	BrD ATOM	1316	HD22	LEU	78	0.808 -
4.145	0.640	1.00	0.00	BrD ATOM	1317	HD23	LEU	78	0.809 -
3.130	2.084	1.00	0.00	BrD ATOM	1318	C	LEU	78	-0.253
0.769	2.066	1.00	0.00	BrD ATOM	1319	O	LEU	78	-1.459
0.663	2.292	1.00	0.00	BrD ATOM	1320	N	GLN	79	0.611
1.252	2.952	1.00	0.00	BrD ATOM	1321	HN	GLN	79	1.551
1.353	2.700	1.00	0.00	BrD ATOM	1322	CA	GLN	79	0.171
1.723	4.254	1.00	0.00	BrD ATOM	1323	HA	GLN	79	-0.198
0.873	4.807	1.00	0.00	BrD ATOM	1324	CB	GLN	79	1.338
2.361	5.015	1.00	0.00	BrD ATOM	1325	HB1	GLN	79	1.045
2.520	6.038	1.00	0.00	BrD ATOM	1326	HB2	GLN	79	2.180
1.686	4.991	1.00	0.00	BrD ATOM	1327	CG	GLN	79	1.781
3.694	4.448	1.00	0.00	BrD ATOM	1328	HG1	GLN	79	1.501
3.740	3.407	1.00	0.00	BrD ATOM	1329	HG2	GLN	79	2.855
3.766	4.538	1.00	0.00	BrD ATOM	1330	CD	GLN	79	1.158
4.871	5.172	1.00	0.00	BrD ATOM	1331	OE1	GLN	79	0.409
5.651	4.585	1.00	0.00	BrD ATOM	1332	NE2	GLN	79	1.467
5.005	6.457	1.00	0.00	BrD ATOM	1333	HE21	GLN	79	1.079
5.757	6.950	1.00	0.00	BrD ATOM	1334	HE22	GLN	79	2.070
4.346	6.859	1.00	0.00	BrD ATOM	1335	C	GLN	79	-0.960
2.732	4.074	1.00	0.00	BrD ATOM	1336	O	GLN	79	-1.787
2.924	4.964	1.00	0.00	BrD ATOM	1337	N	ARG	80	-0.997
3.356	2.895	1.00	0.00	BrD ATOM	1338	HN	ARG	80	-0.321
3.140	2.216	1.00	0.00	BrD ATOM	1339	CA	ARG	80	-2.048
4.306	2.560	1.00	0.00	BrD ATOM	1340	HA	ARG	80	-2.275
4.880	3.447	1.00	0.00	BrD ATOM	1341	CB	ARG	80	-1.579
5.253	1.451	1.00	0.00	BrD ATOM	1342	HB1	ARG	80	-2.401
5.429	0.773	1.00	0.00	BrD ATOM	1343	HB2	ARG	80	-0.770
4.785	0.908	1.00	0.00	BrD ATOM	1344	CG	ARG	80	-1.092
6.598	1.964	1.00	0.00	BrD ATOM	1345	HG1	ARG	80	-0.290
6.434	2.669	1.00	0.00	BrD ATOM	1346	HG2	ARG	80	-0.728
7.180	1.131	1.00	0.00	BrD ATOM	1347	CD	ARG	80	-2.206
7.367	2.654	1.00	0.00	BrD ATOM	1348	HD1	ARG	80	-3.054
6.711	2.780	1.00	0.00	BrD ATOM	1349	HD2	ARG	80	-2.486
8.203	2.031	1.00	0.00	BrD ATOM	1350	NE	ARG	80	-1.796
7.867	3.962	1.00	0.00	BrD ATOM	1351	HE	ARG	80	-0.837
7.874	4.166	1.00	0.00	BrD ATOM	1352	CZ	ARG	80	-2.648
8.310	4.881	1.00	0.00	BrD ATOM	1353	NH1	ARG	80	-2.198
8.750	6.047	1.00	0.00	BrD ATOM	1354	HH11	ARG	80	-1.216
8.749	6.237	1.00	0.00	BrD ATOM	1355	HH12	ARG	80	-2.840
9.083	6.738	1.00	0.00	BrD ATOM	1356	NH2	ARG	80	-3.950
8.314	4.633	1.00	0.00	BrD ATOM	1357	HH21	ARG	80	-4.590
8.647	5.326	1.00	0.00	BrD ATOM	1358	HH22	ARG	80	-4.293
7.983	3.754	1.00	0.00	BrD ATOM	1359	C	ARG	80	-3.305
3.568	2.114	1.00	0.00	BrD ATOM	1360	O	ARG	80	-4.417
3.922	2.502	1.00	0.00	BrD ATOM	1361	N	VAL	81	-3.116
2.536	1.293	1.00	0.00	BrD ATOM	1362	HN	VAL	81	-2.203
2.301	1.024	1.00	0.00	BrD ATOM	1363	CA	VAL	81	-4.231
1.738	0.799	1.00	0.00	BrD ATOM	1364	HA	VAL	81	-4.849
2.374	0.182	1.00	0.00	BrD ATOM	1365	CB	VAL	81	-3.742
0.556	-0.063	1.00	0.00	BrD ATOM	1366	HB	VAL	81	-3.104 -
0.068	0.546	1.00	0.00	BrD ATOM	1367	CG1	VAL	81	-2.926
1.057	-1.244	1.00	0.00	BrD ATOM	1368	HG11	VAL	81	-3.462
0.861	-2.159	1.00	0.00	BrD ATOM	1369	HG12	VAL	81	-1.973
0.545	-1.268	1.00	0.00	BrD ATOM	1370	HG13	VAL	81	-2.763
2.119	-1.146	1.00	0.00	BrD ATOM	1371	CG2	VAL	81	-4.916 -
0.287	-0.539	1.00	0.00	BrD ATOM	1372	HG21	VAL	81	-4.851 -
0.425	-1.608	1.00	0.00	BrD ATOM	1373	HG22	VAL	81	-5.841
0.215	-0.297	1.00	0.00	BrD ATOM	1374	HG23	VAL	81	-4.890 -
1.250	-0.050	1.00	0.00	BrD ATOM	1375	C	VAL	81	-5.069
1.206	1.957	1.00	0.00	BrD ATOM	1376	O	VAL	81	-6.293
1.339	1.964	1.00	0.00	BrD ATOM	1377	N	PHE	82	-4.400
0.610	2.937	1.00	0.00	BrD ATOM	1378	HN	PHE	82	-3.424
0.540	2.876	1.00	0.00	BrD ATOM	1379	CA	PHE	82	-5.079
0.070	4.108	1.00	0.00	BrD ATOM	1380	HA	PHE	82	-5.919 -

0.514	3.764	1.00	0.00	BrD ATOM	1381	CB	PHE	82	-4.131
0.833	4.899	1.00	0.00	BrD ATOM	1382	HB1	PHE	82	-3.486
0.220	5.511	1.00	0.00	BrD ATOM	1383	HB2	PHE	82	-4.712
1.484	5.536	1.00	0.00	BrD ATOM	1384	CG	PHE	82	-3.261
1.695	4.028	1.00	0.00	BrD ATOM	1385	CD1	PHE	82	-1.979
2.035	4.428	1.00	0.00	BrD ATOM	1386	HD1	PHE	82	-1.606
1.677	5.376	1.00	0.00	BrD ATOM	1387	CD2	PHE	82	-3.725
2.162	2.809	1.00	0.00	BrD ATOM	1388	HD2	PHE	82	-4.723
1.901	2.487	1.00	0.00	BrD ATOM	1389	CE1	PHE	82	-1.177
2.827	3.628	1.00	0.00	BrD ATOM	1390	HE1	PHE	82	-0.179
3.086	3.951	1.00	0.00	BrD ATOM	1391	CE2	PHE	82	-2.928
2.952	2.004	1.00	0.00	BrD ATOM	1392	HE2	PHE	82	-3.302
3.311	1.057	1.00	0.00	BrD ATOM	1393	CZ	PHE	82	-1.651
3.284	2.413	1.00	0.00	BrD ATOM	1394	HZ	PHE	82	-1.029
3.906	1.789	1.00	0.00	BrD ATOM	1395	C	PHE	82	-5.594
1.197	4.994	1.00	0.00	BrD ATOM	1396	O	PHE	82	-6.745
1.180	5.431	1.00	0.00	BrD ATOM	1397	N	THR	83	-4.740
2.185	5.241	1.00	0.00	BrD ATOM	1398	HN	THR	83	-3.841
2.149	4.852	1.00	0.00	BrD ATOM	1399	CA	THR	83	-5.119
3.337	6.048	1.00	0.00	BrD ATOM	1400	HA	THR	83	-5.427
2.977	7.019	1.00	0.00	BrD ATOM	1401	CB	THR	83	-3.927
4.282	6.216	1.00	0.00	BrD ATOM	1402	HB	THR	83	-3.525
4.516	5.240	1.00	0.00	BrD ATOM	1403	OG1	THR	83	-2.905
3.666	6.982	1.00	0.00	BrD ATOM	1404	HG1	THR	83	-3.138
3.699	7.913	1.00	0.00	BrD ATOM	1405	CG2	THR	83	-4.283
5.589	6.892	1.00	0.00	BrD ATOM	1406	HG21	THR	83	-4.813
6.222	6.196	1.00	0.00	BrD ATOM	1407	HG22	THR	83	-3.379
6.085	7.214	1.00	0.00	BrD ATOM	1408	HG23	THR	83	-4.910
5.391	7.749	1.00	0.00	BrD ATOM	1409	C	THR	83	-6.286
4.077	5.402	1.00	0.00	BrD ATOM	1410	O	THR	83	-7.073
4.735	6.082	1.00	0.00	BrD ATOM	1411	N	ASN	84	-6.391
3.956	4.082	1.00	0.00	BrD ATOM	1412	HN	ASN	84	-5.732
3.418	3.597	1.00	0.00	BrD ATOM	1413	CA	ASN	84	-7.458
4.609	3.334	1.00	0.00	BrD ATOM	1414	HA	ASN	84	-7.546
5.622	3.698	1.00	0.00	BrD ATOM	1415	CB	ASN	84	-7.113
4.640	1.844	1.00	0.00	BrD ATOM	1416	HB1	ASN	84	-7.095
3.629	1.464	1.00	0.00	BrD ATOM	1417	HB2	ASN	84	-6.138
5.086	1.716	1.00	0.00	BrD ATOM	1418	CG	ASN	84	-8.115
5.438	1.035	1.00	0.00	BrD ATOM	1419	OD1	ASN	84	-9.269
5.596	1.433	1.00	0.00	BrD ATOM	1420	ND2	ASN	84	-7.677
5.945	-0.111	1.00	0.00	BrD ATOM	1421	HD21	ASN	84	-6.745
5.778	-0.365	1.00	0.00	BrD ATOM	1422	HD22	ASN	84	-8.302
6.465	-0.655	1.00	0.00	BrD ATOM	1423	C	ASN	84	-8.788
3.893	3.544	1.00	0.00	BrD ATOM	1424	O	ASN	84	-9.745
4.477	4.051	1.00	0.00	BrD ATOM	1425	N	CYS	85	-8.842
2.623	3.150	1.00	0.00	BrD ATOM	1426	HN	CYS	85	-8.046
2.213	2.751	1.00	0.00	BrD ATOM	1427	CA	CYS	85	-10.058
1.827	3.291	1.00	0.00	BrD ATOM	1428	HA	CYS	85	-10.778
2.193	2.575	1.00	0.00	BrD ATOM	1429	CB	CYS	85	-9.765
0.354	2.995	1.00	0.00	BrD ATOM	1430	HB1	CYS	85	-8.806
0.277	2.504	1.00	0.00	BrD ATOM	1431	HB2	CYS	85	-9.732
0.193	3.926	1.00	0.00	BrD ATOM	1432	SG	CYS	85	-10.992
0.444	1.933	1.00	0.00	BrD ATOM	1433	HG	CYS	85	-10.844
0.144	1.033	1.00	0.00	BrD ATOM	1434	C	CYS	85	-10.645
1.965	4.692	1.00	0.00	BrD ATOM	1435	O	CYS	85	-11.842
2.203	4.854	1.00	0.00	BrD ATOM	1436	N	LYS	86	-9.794
1.817	5.701	1.00	0.00	BrD ATOM	1437	HN	LYS	86	-8.852
1.626	5.508	1.00	0.00	BrD ATOM	1438	CA	LYS	86	-10.228
1.921	7.089	1.00	0.00	BrD ATOM	1439	HA	LYS	86	-11.111
1.310	7.203	1.00	0.00	BrD ATOM	1440	CB	LYS	86	-9.137
1.395	8.023	1.00	0.00	BrD ATOM	1441	HB1	LYS	86	-9.063
0.325	7.903	1.00	0.00	BrD ATOM	1442	HB2	LYS	86	-9.416
1.616	9.043	1.00	0.00	BrD ATOM	1443	CG	LYS	86	-7.768
1.998	7.763	1.00	0.00	BrD ATOM	1444	HG1	LYS	86	-7.809
2.583	6.857	1.00	0.00	BrD ATOM	1445	HG2	LYS	86	-7.050
1.199	7.645	1.00	0.00	BrD ATOM	1446	CD	LYS	86	-7.325
2.892	8.910	1.00	0.00	BrD ATOM	1447	HD1	LYS	86	-6.477
3.478	8.590	1.00	0.00	BrD ATOM	1448	HD2	LYS	86	-8.140
3.548	9.177	1.00	0.00	BrD ATOM	1449	CE	LYS	86	-6.929
2.076	10.130	1.00	0.00	BrD ATOM	1450	HE1	LYS	86	-7.418
1.114	10.078	1.00	0.00	BrD ATOM	1451	HE2	LYS	86	-5.858
1.935	10.120	1.00	0.00	BrD ATOM	1452	NZ	LYS	86	-7.317
2.749	11.400	1.00	0.00	BrD ATOM	1453	HZ1	LYS	86	-8.019
2.174	11.909	1.00	0.00	BrD ATOM	1454	HZ2	LYS	86	-7.729
3.682	11.199	1.00	0.00	BrD ATOM	1455	HZ3	LYS	86	-6.482
2.874	12.008	1.00	0.00	BrD ATOM	1456	C	LYS	86	-10.579
3.360	7.456	1.00	0.00	BrD ATOM	1457	O	LYS	86	-11.293
3.603	8.429	1.00	0.00	BrD ATOM	1458	N	GLU	87	-10.076
4.314	6.676	1.00	0.00	BrD ATOM	1459	HN	GLU	87	-9.514
4.064	5.914	1.00	0.00	BrD ATOM	1460	CA	GLU	87	-10.350
5.724	6.926	1.00	0.00	BrD ATOM	1461	HA	GLU	87	-10.510
5.848	7.986	1.00	0.00	BrD ATOM	1462	CB	GLU	87	-9.158
6.583	6.498	1.00	0.00	BrD ATOM	1463	HB1	GLU	87	-9.513
7.572	6.249	1.00	0.00	BrD ATOM	1464	HB2	GLU	87	-8.706
6.141	5.622	1.00	0.00	BrD ATOM	1465	CG	GLU	87	-8.088
6.716	7.570	1.00	0.00	BrD ATOM	1466	HG1	GLU	87	-7.954
5.757	8.048	1.00	0.00	BrD ATOM	1467	HG2	GLU	87	-7.163
7.016	7.101	1.00	0.00	BrD ATOM	1468	CD	GLU	87	-8.446
7.740	8.629	1.00	0.00	BrD ATOM	1469	OE1	GLU	87	-9.092
8.751	8.283	1.00	0.00	BrD ATOM	1470	OE2	GLU	87	-8.079
7.531	9.805	1.00	0.00	BrD ATOM	1471	C	GLU	87	-11.604
6.172	6.183	1.00	0.00	BrD ATOM	1472	O	GLU	87	-12.542
6.692	6.787	1.00	0.00	BrD ATOM	1473	N	TYR	88	-11.617
5.962	4.871	1.00	0.00	BrD ATOM	1474	HN	TYR	88	-10.840
5.541	4.446	1.00	0.00	BrD ATOM	1475	CA	TYR	88	-12.759
6.339	4.046	1.00	0.00	BrD ATOM	1476	HA	TYR	88	-13.070
7.330	4.344	1.00	0.00	BrD ATOM	1477	CB	TYR	88	-12.361
6.363	2.568	1.00	0.00	BrD ATOM	1478	HB1	TYR	88	-11.310
6.602	2.489	1.00	0.00	BrD ATOM	1479	HB2	TYR	88	-12.537
5.388	2.139	1.00	0.00	BrD ATOM	1480	CG	TYR	88	-13.128
7.376	1.748	1.00	0.00	BrD ATOM	1481	CD1	TYR	88	-12.606
8.640	1.505	1.00	0.00	BrD ATOM	1482	HD1	TYR	88	-11.639
8.896	1.914	1.00	0.00	BrD ATOM	1483	CD2	TYR	88	-14.372
7.066	1.213	1.00	0.00	BrD ATOM	1484	HD2	TYR	88	-14.792
6.087	1.392	1.00	0.00	BrD ATOM	1485	CE1	TYR	88	-13.302
9.568	0.755	1.00	0.00	BrD ATOM	1486	HE1	TYR	88	-12.880
10.546	0.578	1.00	0.00	BrD ATOM	1487	CE2	TYR	88	-15.075
7.989	0.462	1.00	0.00	BrD ATOM	1488	HE2	TYR	88	-16.042
7.730	0.055	1.00	0.00	BrD ATOM	1489	CZ	TYR	88	-14.536
9.238	0.236	1.00	0.00	BrD ATOM	1490	OH	TYR	88	-15.233
10.159	-0.512	1.00	0.00	BrD ATOM	1491	HH	TYR	88	-15.995
10.465	-0.014	1.00	0.00	BrD ATOM	1492	C	TYR	88	-13.923
5.374	4.256	1.00	0.00	BrD ATOM	1493	O	TYR	88	-14.369
4.711	3.320	1.00	0.00	BrD ATOM	1494	N	ASN	89	-14.408
5.298	5.492	1.00	0.00	BrD ATOM	1495	HN	ASN	89	-14.012
5.852	6.195	1.00	0.00	BrD ATOM	1496	CA	ASN	89	-15.518
4.414	5.827	1.00	0.00	BrD ATOM	1497	HA	ASN	89	-16.155
4.336	4.958	1.00	0.00	BrD ATOM	1498	CB	ASN	89	-14.996
3.023	6.192	1.00	0.00	BrD ATOM	1499	HB1	ASN	89	-15.816
2.421	6.557	1.00	0.00	BrD ATOM	1500	HB2	ASN	89	-14.578
2.559	5.311	1.00	0.00	BrD ATOM	1501	CG	ASN	89	-13.925
3.072	7.263	1.00	0.00	BrD ATOM	1502	OD1	ASN	89	-13.552
4.147	7.734	1.00	0.00	BrD ATOM	1503	ND2	ASN	89	-13.424
1.906	7.655	1.00	0.00	BrD ATOM	1504	HD21	ASN	89	-13.770
1.090	7.236	1.00	0.00	BrD ATOM	1505	HD22	ASN	89	-12.731
1.909	8.347	1.00	0.00	BrD ATOM	1506	C	ASN	89	-16.332
4.982	6.985	1.00	0.00	BrD ATOM	1507	O	ASN	89	-16.088
4.658	8.147	1.00	0.00	BrD ATOM	1508	N	ALA	90	-17.296
5.836	6.659	1.00	0.00	BrD ATOM	1509	HN	ALA	90	-17.438
6.058	5.715	1.00	0.00	BrD ATOM	1510	CA	ALA	90	-18.142
6.458	7.670	1.00	0.00	BrD ATOM	1511	HA	ALA	90	-17.525
7.122	8.258	1.00	0.00	BrD ATOM	1512	CB	ALA	90	-19.228
7.291	7.006	1.00	0.00	BrD ATOM	1513	HB1	ALA	90	-19.280
7.045	5.956	1.00	0.00	BrD ATOM	1514	HB2	ALA	90	-18.997
8.340	7.119	1.00	0.00	BrD ATOM	1515	HB3	ALA	90	-20.179
7.081	7.473	1.00	0.00	BrD ATOM	1516	C	ALA	90	-18.764
5.414	8.594	1.00	0.00	BrD ATOM	1517	O	ALA	90	-18.728
5.557	9.817	1.00	0.00	BrD ATOM	1518	N	PRO	91	-19.346
4.347	8.021	1.00	0.00	BrD ATOM	1519	CA	PRO	91	-20.000
3.290	8.783	1.00	0.00	BrD ATOM	1520	HA	PRO	91	-20.495
3.681	9.659	1.00	0.00	BrD ATOM	1521	CB	PRO	91	-21.048
2.740	7.800	1.00	0.00	BrD ATOM	1522	HB1	PRO	91	-20.932
1.670	7.715	1.00	0.00	BrD ATOM	1523	HB2	PRO	91	-22.038
2.966	8.169	1.00	0.00	BrD ATOM	1524	CG	PRO	91	-20.794
3.419	6.483	1.00	0.00	BrD ATOM	1525	HG1	PRO	91	-20.778
2.684	5.692	1.00	0.00	BrD ATOM	1526	HG2	PRO	91	-21.566
4.151	6.296	1.00	0.00	BrD ATOM	1527	CD	PRO	91	-19.456
4.095	6.587	1.00	0.00	BrD ATOM	1528	HD1	PRO	91	-18.670
3.436	6.247	1.00	0.00	BrD ATOM	1529	HD2	PRO	91	-19.450
5.018	6.027	1.00	0.00	BrD ATOM	1530	C	PRO	91	-19.035
2.183	9.196	1.00	0.00	BrD ATOM	1531	O	PRO	91	-19.458
1.079	9.540	1.00	0.00	BrD ATOM	1532	N	GLU	92	-17.736
2.481	9.160	1.00	0.00	BrD ATOM	1533	HN	GLU	92	-17.462
3.377	8.873	1.00	0.00	BrD ATOM	1534	CA	GLU	92	-16.703
1.506	9.521	1.00	0.00	BrD ATOM	1535	HA	GLU	92	-15.779
1.838	9.083	1.00	0.00	BrD ATOM	1536	CB	GLU	92	-16.529
1.439	11.039	1.00	0.00	BrD ATOM	1537	HB1	GLU	92	-15.786
0.690	11.272	1.00	0.00	BrD ATOM	1538	HB2	GLU	92	-16.182
2.399	11.393	1.00	0.00	BrD ATOM	1539	CG	GLU	92	-17.805
1.092	11.778	1.00	0.00	BrD ATOM	1540	HG1	GLU	92	-18.550
1.831	11.537	1.00	0.00	BrD ATOM	1541	HG2	GLU	92	-18.143
0.119	11.452	1.00	0.00	BrD ATOM	1542	CD	GLU	92	-17.622
1.062	13.283	1.00	0.00	BrD ATOM	1543	OE1	GLU	92	-18.536
1.517	14.001	1.00	0.00	BrD ATOM	1544	OE2	GLU	92	-16.564
0.581	13.743	1.00	0.00	BrD ATOM	1545	C	GLU	92	-17.029
0.119	8.974	1.00	0.00	BrD ATOM	1546	O	GLU	92	-16.862
0.887	9.663	1.00	0.00	BrD ATOM	1547	N	SER	93	-17.508
0.081	7.736	1.00	0.00	BrD ATOM	1548	HN	SER	93	-17.620
0.919	7.240	1.00	0.00	BrD ATOM	1549	CA	SER	93	-17.863
1.176	7.092	1.00	0.00	BrD ATOM	1550	HA	SER	93	-18.677
1.616	7.649	1.00	0.00	BrD ATOM	1551	CB	SER	93	-18.317
0.925	5.653	1.00	0.00	BrD ATOM	1552	HB1	SER	93	-17.475
1.052	4.986	1.00	0.00	BrD ATOM	1553	HB2	SER	93	-18.695
0.084	5.568	1.00	0.00	BrD ATOM	1554	OG	SER	93	-19.339
1.830	5.274	1.00	0.00	BrD ATOM	1555	HG	SER	93	-19.610
1.648	4.371	1.00	0.00	BrD ATOM	1556	C	SER	93	-16.686
2.141	7.099	1.00	0.00	BrD ATOM	1557	O	SER	93	-15.700
1.932	7.807	1.00	0.00	BrD ATOM	1558	N	GLU	94	-16.790
3.194	6.298	1.00	0.00	BrD ATOM	1559	HN	GLU	94	-17.598
3.303	5.754	1.00	0.00	BrD ATOM	1560	CA	GLU	94	-15.729
4.186	6.204	1.00	0.00	BrD ATOM	1561	HA	GLU	94	-15.574
4.596	7.191	1.00	0.00	BrD ATOM	1562	CB	GLU	94	-16.144
5.314	5.258	1.00	0.00	BrD ATOM	1563	HB1	GLU	94	-16.411
4.887	4.302	1.00	0.00	BrD ATOM	1564	HB2	GLU	94	-17.006
5.817	5.671	1.00	0.00	BrD ATOM	1565	CG	GLU	94	-15.054
6.346	5.031	1.00	0.00	BrD ATOM	1566	HG1	GLU	94	-14.187
5.849	4.622	1.00	0.00	BrD ATOM	1567	HG2	GLU	94	-14.797
6.793	5.981	1.00	0.00	BrD ATOM	1568	CD	GLU	94	-15.479
7.446	4.078	1.00	0.00	BrD ATOM	1569	OE1	GLU	94	-16.617
7.382	3.568	1.00	0.00	BrD ATOM	1570	OE2	GLU	94	-14.673
8.370	3.840	1.00	0.00	BrD ATOM	1571	C	GLU	94	-14.422
3.556	5.725	1.00	0.00	BrD ATOM	1572	O	GLU	94	-13.351
4.143	5.876	1.00	0.00	BrD ATOM	1573	N	TYR	95	-14.510
2.357	5.150	1.00	0.00	BrD ATOM	1574	HN	TYR	95	-15.387
1.930	5.057	1.00	0.00	BrD ATOM	1575	CA	TYR	95	-13.327
1.658	4.663	1.00	0.00	BrD ATOM	1576	HA	TYR	95	-12.919
2.227	3.841	1.00	0.00	BrD ATOM	1577	CB	TYR	95	-13.704
0.260	4.166	1.00	0.00	BrD ATOM	1578	HB1	TYR	95	-14.448
0.160	4.827	1.00	0.00	BrD ATOM	1579	HB2	TYR	95	-12.825
0.367	4.176	1.00	0.00	BrD ATOM	1580	CG	TYR	95	-14.270
0.244	2.762	1.00	0.00	BrD ATOM	1581	CD1	TYR	95	-14.933
1.350	2.245	1.00	0.00	BrD ATOM	1582	HD1	TYR	95	-15.041
2.232	2.859	1.00	0.00	BrD ATOM	1583	CD2	TYR	95	-14.141
0.880	1.956	1.00	0.00	BrD ATOM	1584	HD2	TYR	95	-13.630
1.749	2.343	1.00	0.00	BrD ATOM	1585	CE1	TYR	95	-15.450
1.337	0.963	1.00	0.00	BrD ATOM	1586	HE1	TYR	95	-15.961
2.208	0.579	1.00	0.00	BrD ATOM	1587	CE2	TYR	95	-14.656
0.901	0.673	1.00	0.00	BrD ATOM	1588	HE2	TYR	95	-14.546
1.785	0.062	1.00	0.00	BrD ATOM	1589	CZ	TYR	95	-15.310
0.210	0.182	1.00	0.00	BrD ATOM	1590	OH	TYR	95	-15.823
0.193	-1.095	1.00	0.00	BrD ATOM	1591	HH	TYR	95	-16.730
0.508	-1.079	1.00	0.00	BrD ATOM	1592	C	TYR	95	-12.274
1.552	5.761	1.00	0.00	BrD ATOM	1593	O	TYR	95	-11.076
1.511	5.485	1.00	0.00	BrD ATOM	1594	N	TYR	96	-12.733
1.513	7.007	1.00	0.00	BrD ATOM	1595	HN	TYR	96	-13.700
1.553	7.161	1.00	0.00	BrD ATOM	1596	CA	TYR	96	-11.835
1.421	8.152	1.00	0.00	BrD ATOM	1597	HA	TYR	96	-11.033
0.746	7.889	1.00	0.00	BrD ATOM	1598	CB	TYR	96	-12.581
0.860	9.365	1.00	0.00	BrD ATOM	1599	HB1	TYR	96	-13.397
1.522	9.615	1.00	0.00	BrD ATOM	1600	HB2	TYR	96	-12.977
0.114	9.116	1.00	0.00	BrD ATOM	1601	CG	TYR	96	-11.712
0.708	10.594	1.00	0.00	BrD ATOM	1602	CD1	TYR	96	-10.351
0.458	10.477	1.00	0.00	BrD ATOM	1603	HD1	TYR	96	-9.918
0.375	9.493	1.00	0.00	BrD ATOM	1604	CD2	TYR	96	-12.252
0.815	11.870	1.00	0.00	BrD ATOM	1605	HD2	TYR	96	-13.308
1.009	11.979	1.00	0.00	BrD ATOM	1606	CE1	TYR	96	-9.551
0.319	11.594	1.00	0.00	BrD ATOM	1607	HE1	TYR	96	-8.495
0.125	11.480	1.00	0.00	BrD ATOM	1608	CE2	TYR	96	-11.458
0.677	12.993	1.00	0.00	BrD ATOM	1609	HE2	TYR	96	-11.895
0.763	13.977	1.00	0.00	BrD ATOM	1610	CZ	TYR	96	-10.109
0.429	12.849	1.00	0.00	BrD ATOM	1611	OH	TYR	96	-9.315
0.291	13.964	1.00	0.00	BrD ATOM	1612	HH	TYR	96	-8.479
0.742	13.821	1.00	0.00	BrD ATOM	1613	C	TYR	96	-11.238
2.783	8.497	1.00	0.00	BrD ATOM	1614	O	TYR	96	-10.238
2.868	9.211	1.00	0.00	BrD ATOM	1615	N	LYS	97	-11.857
3.849	7.995	1.00	0.00	BrD ATOM	1616	HN	LYS	97	-12.650
3.728	7.435	1.00	0.00	BrD ATOM	1617	CA	LYS	97	-11.390
5.200	8.256	1.00	0.00	BrD ATOM	1618	HA	LYS	97	-11.067
5.248	9.285	1.00	0.00	BrD ATOM	1619	CB	LYS	97	-12.547
6.183	8.044	1.00	0.00	BrD ATOM	1620	HB1	LYS	97	-13.075
5.901	7.145	1.00	0.00	BrD ATOM	1621	HB2	LYS	97	-13.223
6.110	8.884	1.00	0.00	BrD ATOM	1622	CG	LYS	97	-12.120
7.632	7.902	1.00	0.00	BrD ATOM	1623	HG1	LYS	97	-11.914
7.826	6.862	1.00	0.00	BrD ATOM	1624	HG2	LYS	97	-11.227
7.795	8.487	1.00	0.00	BrD ATOM	1625	CD	LYS	97	-13.205
8.584	8.379	1.00	0.00	BrD ATOM	1626	HD1	LYS	97	-14.156
8.255	7.989	1.00	0.00	BrD ATOM	1627	HD2	LYS	97	-12.986
9.576	8.013	1.00	0.00	BrD ATOM	1628	CE	LYS	97	-13.282
8.625	9.897	1.00	0.00	BrD ATOM	1629	HE1	LYS	97	-13.091
7.633	10.281	1.00	0.00	BrD ATOM	1630	HE2	LYS	97	-12.527
9.304	10.265	1.00	0.00	BrD ATOM	1631	NZ	LYS	97	-14.617
9.080	10.374	1.00	0.00	BrD ATOM	1632	HZ1	LYS	97	-14.760
10.082	10.135	1.00	0.00	BrD ATOM	1633	HZ2	LYS	97	-15.368
8.517	9.926	1.00	0.00	BrD ATOM	1634	HZ3	LYS	97	-14.685
8.968	11.406	1.00	0.00	BrD ATOM	1635	C	LYS	97	-10.212
5.550	7.349	1.00	0.00	BrD ATOM	1636	O	LYS	97	-9.123
5.870	7.824	1.00	0.00	BrD ATOM	1637	N	CYS	98	-10.443
5.490	6.040	1.00	0.00	BrD ATOM	1638	HN	CYS	98	-11.334
5.233	5.724	1.00	0.00	BrD ATOM	1639	CA	CYS	98	-9.408
5.811	5.062	1.00	0.00	BrD ATOM	1640	HA	CYS	98	-9.253
6.879	5.086	1.00	0.00	BrD ATOM	1641	CB	CYS	98	-9.862
5.408	3.660	1.00	0.00	BrD ATOM	1642	HB1	CYS	98	-9.000
5.351	3.012	1.00	0.00	BrD ATOM	1643	HB2	CYS	98	-10.337
4.440	3.707	1.00	0.00	BrD ATOM	1644	SG	CYS	98	-11.036
6.562	2.916	1.00	0.00	BrD ATOM	1645	HG	CYS	98	-11.755
6.695	3.538	1.00	0.00	BrD ATOM	1646	C	CYS	98	-8.093
5.121	5.405	1.00	0.00	BrD ATOM	1647	O	CYS	98	-7.040
5.757	5.442	1.00	0.00	BrD ATOM	1648	N	ALA	99	-8.159
3.820	5.668	1.00	0.00	BrD ATOM	1649	HN	ALA	99	-9.028
3.368	5.644	1.00	0.00	BrD ATOM	1650	CA	ALA	99	-6.975
3.066	6.046	1.00	0.00	BrD ATOM	1651	HA	ALA	99	-6.290
3.066	5.214	1.00	0.00	BrD ATOM	1652	CB	ALA	99	-7.339
1.623	6.363	1.00	0.00	BrD ATOM	1653	HB1	ALA	99	-8.281
1.597	6.890	1.00	0.00	BrD ATOM	1654	HB2	ALA	99	-7.425
1.063	5.443	1.00	0.00	BrD ATOM	1655	HB3	ALA	99	-6.568
1.185	6.980	1.00	0.00	BrD ATOM	1656	C	ALA	99	-6.293
3.721	7.232	1.00	0.00	BrD ATOM	1657	O	ALA	99	-5.091
3.963	7.207	1.00	0.00	BrD ATOM	1658	N	ASN	100	-7.080
4.054	8.247	1.00	0.00	BrD ATOM	1659	HN	ASN	100	-8.039
3.848	8.199	1.00	0.00	BrD ATOM	1660	CA	ASN	100	-6.550
4.702	9.438	1.00	0.00	BrD ATOM	1661	HA	ASN	100	-5.922
3.988	9.949	1.00	0.00	BrD ATOM	1662	CB	ASN	100	-7.697

REPLACEMENT SHEET

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5.116  10.363  1.00  0.00      BrD ATOM   1663  HB1 ASN   100      -8.587  -
4.570  10.089  1.00  0.00      BrD ATOM   1664  HB2 ASN   100      -7.879  -
6.174  10.247  1.00  0.00      BrD ATOM   1665  CG  ASN   100      -7.395  -
4.838  11.822  1.00  0.00      BrD ATOM   1666  OD1 ASN   100      -7.283  -
3.684  12.236  1.00  0.00      BrD ATOM   1667  ND2 ASN   100      -7.266  -
5.898  12.611  1.00  0.00      BrD ATOM   1668 HD21 ASN   100      -7.370  -
6.787  12.212  1.00  0.00      BrD ATOM   1669 HD22 ASN   100      -7.072  -
5.748  13.560  1.00  0.00      BrD ATOM   1670  C   ASN   100      -5.711  -
5.922   9.069  1.00  0.00      BrD ATOM   1671  O   ASN   100      -4.740  -
6.251   9.753  1.00  0.00      BrD ATOM   1672  N   ILE   101      -6.088  -
6.587   7.981  1.00  0.00      BrD ATOM   1673  HN  ILE   101      -6.870  -
6.277   7.481  1.00  0.00      BrD ATOM   1674  CA  ILE   101      -5.377  -
7.777   7.524  1.00  0.00      BrD ATOM   1675  HA  ILE   101      -5.132  -
8.370   8.394  1.00  0.00      BrD ATOM   1676  CB  ILE   101      -6.254  -
8.636   6.594  1.00  0.00      BrD ATOM   1677  HB  ILE   101      -6.469  -
8.061   5.705  1.00  0.00      BrD ATOM   1678 CG1  ILE   101      -7.569  -
8.996   7.290  1.00  0.00      BrD ATOM   1679 HG11 ILE   101      -8.112  -
8.090   7.513  1.00  0.00      BrD ATOM   1680 HG12 ILE   101      -7.350  -
9.516   8.212  1.00  0.00      BrD ATOM   1681 CG2  ILE   101      -5.509  -
9.894   6.177  1.00  0.00      BrD ATOM   1682 HG21 ILE   101      -6.221  -
10.659  5.902  1.00  0.00      BrD ATOM   1683 HG22 ILE   101      -4.905  -
10.244  7.001  1.00  0.00      BrD ATOM   1684 HG23 ILE   101      -4.874  -
9.673   5.333  1.00  0.00      BrD ATOM   1685  CD1 ILE   101      -8.470  -
9.885   6.461  1.00  0.00      BrD ATOM   1686 HD11 ILE   101      -9.158  -
10.406  7.109  1.00  0.00      BrD ATOM   1687 HD12 ILE   101      -7.869  -
10.604  5.922  1.00  0.00      BrD ATOM   1688 HD13 ILE   101      -9.024  -
9.281   5.758  1.00  0.00      BrD ATOM   1689  C   ILE   101      -4.084  -
7.408   6.802  1.00  0.00      BrD ATOM   1690  O   ILE   101      -2.993  -
7.580   7.345  1.00  0.00      BrD ATOM   1691  N   LEU   102      -4.206  -
6.890   5.579  1.00  0.00      BrD ATOM   1692  HN  LEU   102      -5.100  -
6.770   5.196  1.00  0.00      BrD ATOM   1693  CA  LEU   102      -3.033  -
6.488   4.800  1.00  0.00      BrD ATOM   1694  HA  LEU   102      -2.519  -
7.384   4.485  1.00  0.00      BrD ATOM   1695  CB  LEU   102      -3.454  -
5.690   3.565  1.00  0.00      BrD ATOM   1696  HB1 LEU   102      -4.530  -
5.734   3.485  1.00  0.00      BrD ATOM   1697  HB2 LEU   102      -3.164  -
4.661   3.717  1.00  0.00      BrD ATOM   1698  CG  LEU   102      -2.852  -
6.166   2.236  1.00  0.00      BrD ATOM   1699  HG  LEU   102      -2.990  -
5.394   1.493  1.00  0.00      BrD ATOM   1700  CD1 LEU   102      -3.570  -
7.417   1.745  1.00  0.00      BrD ATOM   1701 HD11 LEU   102      -4.201  -
7.803   2.533  1.00  0.00      BrD ATOM   1702 HD12 LEU   102      -2.843  -
8.165   1.468  1.00  0.00      BrD ATOM   1703 HD13 LEU   102      -4.180  -
7.170   0.887  1.00  0.00      BrD ATOM   1704  CD2 LEU   102      -1.353  -
6.418   2.376  1.00  0.00      BrD ATOM   1705 HD21 LEU   102      -1.167  -
7.481   2.412  1.00  0.00      BrD ATOM   1706 HD22 LEU   102      -0.992  -
5.959   3.285  1.00  0.00      BrD ATOM   1707 HD23 LEU   102      -0.833  -
5.992   1.529  1.00  0.00      BrD ATOM   1708  C   LEU   102      -2.087  -
5.649   5.649  1.00  0.00      BrD ATOM   1709  O   LEU   102      -0.868  -
5.770   5.546  1.00  0.00      BrD ATOM   1710  N   GLU   103      -2.661  -
4.792   6.486  1.00  0.00      BrD ATOM   1711  HN  GLU   103      -3.639  -
4.747   6.528  1.00  0.00      BrD ATOM   1712  CA  GLU   103      -1.872  -
3.948   7.369  1.00  0.00      BrD ATOM   1713  HA  GLU   103      -1.199  -
3.364   6.758  1.00  0.00      BrD ATOM   1714  CB  GLU   103      -2.781  -
3.002   8.159  1.00  0.00      BrD ATOM   1715  HB1 GLU   103      -3.230  -
2.297   7.475  1.00  0.00      BrD ATOM   1716  HB2 GLU   103      -3.559  -
3.579   8.627  1.00  0.00      BrD ATOM   1717  CG  GLU   103      -2.060  -
2.222   9.242  1.00  0.00      BrD ATOM   1718  HG1 GLU   103      -2.356  -
2.611  10.205  1.00  0.00      BrD ATOM   1719  HG2 GLU   103      -0.999  -
2.356   9.112  1.00  0.00      BrD ATOM   1720  CD  GLU   103      -2.373  -
0.740   9.200  1.00  0.00      BrD ATOM   1721  OE1 GLU   103      -2.248  -
0.077  10.251  1.00  0.00      BrD ATOM   1722  OE2 GLU   103      -2.745  -
0.242   8.117  1.00  0.00      BrD ATOM   1723  C   GLU   103      -1.052  -
4.808   8.322  1.00  0.00      BrD ATOM   1724  O   GLU   103       0.175  -
4.759   8.317  1.00  0.00      BrD ATOM   1725  N   LYS   104      -1.740  -
5.627   9.114  1.00  0.00      BrD ATOM   1726  HN  LYS   104      -2.720  -
5.629   9.066  1.00  0.00      BrD ATOM   1727  CA  LYS   104      -1.072  -
6.511  10.062  1.00  0.00      BrD ATOM   1728  HA  LYS   104      -0.569  -
5.894  10.792  1.00  0.00      BrD ATOM   1729  CB  LYS   104      -2.097  -
7.395  10.777  1.00  0.00      BrD ATOM   1730  HB1 LYS   104      -2.976  -
7.479  10.157  1.00  0.00      BrD ATOM   1731  HB2 LYS   104      -1.670  -
8.377  10.917  1.00  0.00      BrD ATOM   1732  CG  LYS   104      -2.520  -
6.861  12.136  1.00  0.00      BrD ATOM   1733  HG1 LYS   104      -3.354  -
7.445  12.497  1.00  0.00      BrD ATOM   1734  HG2 LYS   104      -1.691  -
6.951  12.822  1.00  0.00      BrD ATOM   1735  CD  LYS   104      -2.938  -
5.401  12.056  1.00  0.00      BrD ATOM   1736  HD1 LYS   104      -2.817  -
5.059  11.039  1.00  0.00      BrD ATOM   1737  HD2 LYS   104      -2.306  -
4.819  12.712  1.00  0.00      BrD ATOM   1738  CE  LYS   104      -4.387  -
5.210  12.469  1.00  0.00      BrD ATOM   1739  HE1 LYS   104      -4.975  -
5.002  11.587  1.00  0.00      BrD ATOM   1740  HE2 LYS   104      -4.741  -
6.120  12.930  1.00  0.00      BrD ATOM   1741  NZ  LYS   104      -4.547  -
4.085  13.432  1.00  0.00      BrD ATOM   1742  HZ1 LYS   104      -5.135  -
4.384  14.236  1.00  0.00      BrD ATOM   1743  HZ2 LYS   104      -5.004  -
3.277  12.964  1.00  0.00      BrD ATOM   1744  HZ3 LYS   104      -3.618  -
3.785  13.788  1.00  0.00      BrD ATOM   1745  C   LYS   104      -0.039  -
7.383   9.357  1.00  0.00      BrD ATOM   1746  O   LYS   104       1.021  -
7.678   9.910  1.00  0.00      BrD ATOM   1747  N   PHE   105      -0.357  -
7.796   8.135  1.00  0.00      BrD ATOM   1748  HN  PHE   105      -1.217  -
7.528   7.749  1.00  0.00      BrD ATOM   1749  CA  PHE   105       0.541  -
8.636   7.352  1.00  0.00      BrD ATOM   1750  HA  PHE   105       0.954  -
9.385   8.011  1.00  0.00      BrD ATOM   1751  CB  PHE   105      -0.229  -
9.331   6.228  1.00  0.00      BrD ATOM   1752  HB1 PHE   105       0.455  -
9.569   5.426  1.00  0.00      BrD ATOM   1753  HB2 PHE   105      -0.992  -
8.662   5.857  1.00  0.00      BrD ATOM   1754  CG  PHE   105      -0.899  -
10.604  6.658  1.00  0.00      BrD ATOM   1755  CD1 PHE   105      -0.202  -
11.559  7.381  1.00  0.00      BrD ATOM   1756  HD1 PHE   105       0.833  -
11.381  7.633  1.00  0.00      BrD ATOM   1757  CD2 PHE   105      -2.226  -
10.844  6.342  1.00  0.00      BrD ATOM   1758  HD2 PHE   105      -2.779  -
10.106  5.780  1.00  0.00      BrD ATOM   1759  CE1 PHE   105      -0.816  -
12.730  7.780  1.00  0.00      BrD ATOM   1760  HE1 PHE   105      -0.262  -
13.467  8.342  1.00  0.00      BrD ATOM   1761  CE2 PHE   105      -2.846  -
12.013  6.738  1.00  0.00      BrD ATOM   1762  HE2 PHE   105      -3.881  -
12.188  6.485  1.00  0.00      BrD ATOM   1763  CZ  PHE   105      -2.140  -
12.958  7.458  1.00  0.00      BrD ATOM   1764  HZ  PHE   105      -2.623  -
13.873  7.768  1.00  0.00      BrD ATOM   1765  C   PHE   105       1.684  -
7.817   6.766  1.00  0.00      BrD ATOM   1766  O   PHE   105       2.845  -
7.998   7.133  1.00  0.00      BrD ATOM   1767  N   PHE   106       1.347  -
6.917   5.849  1.00  0.00      BrD ATOM   1768  HN  PHE   106       0.405  -
6.824   5.595  1.00  0.00      BrD ATOM   1769  CA  PHE   106       2.344  -
6.075   5.202  1.00  0.00      BrD ATOM   1770  HA  PHE   106       2.956  -
6.711   4.579  1.00  0.00      BrD ATOM   1771  CB  PHE   106       1.665  -
5.021   4.325  1.00  0.00      BrD ATOM   1772 HB1  PHE   106       0.985  -
5.512   3.644  1.00  0.00      BrD ATOM   1773 HB2  PHE   106       1.110  -
4.341   4.954  1.00  0.00      BrD ATOM   1774  CG  PHE   106       2.633  -
4.213   3.510  1.00  0.00      BrD ATOM   1775  CD1 PHE   106       3.519  -
4.836   2.649  1.00  0.00      BrD ATOM   1776  HD1 PHE   106       3.508  -
5.913   2.565  1.00  0.00      BrD ATOM   1777  CD2 PHE   106       2.662  -
2.831   3.612  1.00  0.00      BrD ATOM   1778  HD2 PHE   106       1.974  -
2.333   4.279  1.00  0.00      BrD ATOM   1779  CE1 PHE   106       4.413  -
4.098   1.898  1.00  0.00      BrD ATOM   1780  HE1 PHE   106       5.098  -
4.598   1.229  1.00  0.00      BrD ATOM   1781  CE2 PHE   106       3.548  -
2.086   2.857  1.00  0.00      BrD ATOM   1782  HE2 PHE   106       3.562  -
1.010   2.946  1.00  0.00      BrD ATOM   1783  CZ  PHE   106       4.432  -
2.721   2.005  1.00  0.00      BrD ATOM   1784  HZ  PHE   106       5.127  -
2.142   1.417  1.00  0.00      BrD ATOM   1785  C   PHE   106       3.236  -
5.388   6.230  1.00  0.00      BrD ATOM   1786  O   PHE   106       4.439  -
5.637   6.282  1.00  0.00      BrD ATOM   1787  N   PHE   107       2.643  -
4.516   7.043  1.00  0.00      BrD ATOM   1788  HN  PHE   107       1.679  -
4.349   6.948  1.00  0.00      BrD ATOM   1789  CA  PHE   107       3.401  -
3.784   8.058  1.00  0.00      BrD ATOM   1790  HA  PHE   107       4.035  -
3.076   7.543  1.00  0.00      BrD ATOM   1791  CB  PHE   107       2.462  -
3.014   8.995  1.00  0.00      BrD ATOM   1792 HB1  PHE   107       1.719  -
3.692   9.384  1.00  0.00      BrD ATOM   1793 HB2  PHE   107       3.040  -
2.618   9.817  1.00  0.00      BrD ATOM   1794  CG  PHE   107       1.741  -
1.858   8.345  1.00  0.00      BrD ATOM   1795  CD1 PHE   107       1.007  -
0.971   9.117  1.00  0.00      BrD ATOM   1796  HD1 PHE   107       0.954  -
1.118  10.186  1.00  0.00      BrD ATOM   1797  CD2 PHE   107       1.798  -
1.652   6.972  1.00  0.00      BrD ATOM   1798  HD2 PHE   107       2.368  -
2.334   6.357  1.00  0.00      BrD ATOM   1799  CE1 PHE   107       0.345
0.095   8.537  1.00  0.00      BrD ATOM   1800  HE1 PHE   107      -0.224
0.776   9.151  1.00  0.00      BrD ATOM   1801  CE2 PHE   107       1.137  -
0.588   6.387  1.00  0.00      BrD ATOM   1802  HE2 PHE   107       1.192  -
0.439   5.318  1.00  0.00      BrD ATOM   1803  CZ  PHE   107       0.410
0.286   7.171  1.00  0.00      BrD ATOM   1804  HZ  PHE   107      -0.108
1.118   6.718  1.00  0.00      BrD ATOM   1805  C   PHE   107       4.287  -
4.727   8.867  1.00  0.00      BrD ATOM   1806  O   PHE   107       5.369  -
4.345   9.312  1.00  0.00      BrD ATOM   1807  N   SER   108       3.825  -
5.960   9.054  1.00  0.00      BrD ATOM   1808  HN  SER   108       2.968  -
6.218   8.654  1.00  0.00      BrD ATOM   1809  CA  SER   108       4.607  -
6.959   9.773  1.00  0.00      BrD ATOM   1810  HA  SER   108       4.981  -
6.503  10.678  1.00  0.00      BrD ATOM   1811  CB  SER   108       3.740  -
8.166  10.136  1.00  0.00      BrD ATOM   1812 HB1  SER   108       2.987  -
7.864  10.848  1.00  0.00      BrD ATOM   1813 HB2  SER   108       3.262  -
8.546   9.245  1.00  0.00      BrD ATOM   1814  OG  SER   108       4.521  -
9.200  10.711  1.00  0.00      BrD ATOM   1815  HG  SER   108       4.902  -
9.739  10.014  1.00  0.00      BrD ATOM   1816  C   SER   108       5.784  -
7.395   8.915  1.00  0.00      BrD ATOM   1817  O   SER   108       6.887  -
7.618   9.413  1.00  0.00      BrD ATOM   1818  N   LYS   109       5.540  -
7.475   7.613  1.00  0.00      BrD ATOM   1819  HN  LYS   109       4.643  -
7.256   7.283  1.00  0.00      BrD ATOM   1820  CA  LYS   109       6.578  -
7.819   6.656  1.00  0.00      BrD ATOM   1821  HA  LYS   109       7.113  -
8.679   7.032  1.00  0.00      BrD ATOM   1822  CB  LYS   109       5.950  -
8.163   5.306  1.00  0.00      BrD ATOM   1823 HB1  LYS   109       4.898  -
7.922   5.340  1.00  0.00      BrD ATOM   1824 HB2  LYS   109       6.421  -
7.566   4.542  1.00  0.00      BrD ATOM   1825  CG  LYS   109       6.090  -
9.626   4.926  1.00  0.00      BrD ATOM   1826 HG1  LYS   109       5.522  -
9.811   4.026  1.00  0.00      BrD ATOM   1827 HG2  LYS   109       7.133  -
9.844   4.748  1.00  0.00      BrD ATOM   1828  CD  LYS   109       5.577  -
10.535   6.029  1.00  0.00      BrD ATOM   1829  HD1 LYS   109       6.413  -
10.864   6.629  1.00  0.00      BrD ATOM   1830  HD2 LYS   109       4.885  -
9.981   6.646  1.00  0.00      BrD ATOM   1831  CE  LYS   109       4.866  -
11.751   5.462  1.00  0.00      BrD ATOM   1832  HE1 LYS   109       5.179  -
11.889   4.438  1.00  0.00      BrD ATOM   1833  HE2 LYS   109       3.801  -
11.575   5.491  1.00  0.00      BrD ATOM   1834  NZ  LYS   109       5.175  -
12.986   6.235  1.00  0.00      BrD ATOM   1835  HZ1 LYS   109       6.202  -
13.148   6.254  1.00  0.00      BrD ATOM   1836  HZ2 LYS   109       4.715  -
13.808   5.795  1.00  0.00      BrD ATOM   1837  HZ3 LYS   109       4.831  -
12.892   7.212  1.00  0.00      BrD ATOM   1838  C   LYS   109       7.547  -
6.653   6.504  1.00  0.00      BrD ATOM   1839  O   LYS   109       8.761  -
6.842   6.428  1.00  0.00      BrD ATOM   1840  N   ILE   110       6.994  -
5.441   6.492  1.00  0.00      BrD ATOM   1841  HN  ILE   110       6.022  -
5.363   6.581  1.00  0.00      BrD ATOM   1842  CA  ILE   110       7.796  -
4.223   6.407  1.00  0.00      BrD ATOM   1843  HA  ILE   110       8.198  -
4.138   5.405  1.00  0.00      BrD ATOM   1844  CB  ILE   110       6.935  -
2.973   6.692  1.00  0.00      BrD ATOM   1845  HB  ILE   110       6.496  -
3.087   7.671  1.00  0.00      BrD ATOM   1846 CG1  ILE   110       5.811  -
2.844   5.654  1.00  0.00      BrD ATOM   1847 HG11 ILE   110       5.353  -
3.811   5.511  1.00  0.00      BrD ATOM   1848 HG12 ILE   110       5.068  -
2.153   6.026  1.00  0.00      BrD ATOM   1849 CG2  ILE   110       7.798  -
1.722   6.712  1.00  0.00      BrD ATOM   1850 HG21 ILE   110       8.756  -
1.945   6.264  1.00  0.00      BrD ATOM   1851 HG22 ILE   110       7.944  -
1.401   7.732  1.00  0.00      BrD ATOM   1852 HG23 ILE   110       7.311  -
0.938   6.152  1.00  0.00      BrD ATOM   1853  CD1 ILE   110       6.269  -
2.345   4.297  1.00  0.00      BrD ATOM   1854 HD11 ILE   110       6.222  -
3.153   3.583  1.00  0.00      BrD ATOM   1855 HD12 ILE   110       7.283  -
1.985   4.366  1.00  0.00      BrD ATOM   1856 HD13 ILE   110       5.623  -
1.540   3.971  1.00  0.00      BrD ATOM   1857  C   ILE   110       8.948  -
4.274   7.411  1.00  0.00      BrD ATOM   1858  O   ILE   110      10.104  -
4.045   7.060  1.00  0.00      BrD ATOM   1859  N   LYS   111       8.615  -
4.582   8.662  1.00  0.00      BrD ATOM   1860  HN  LYS   111       7.674  -
4.752   8.875  1.00  0.00      BrD ATOM   1861  CA  LYS   111       9.608  -
4.664   9.730  1.00  0.00      BrD ATOM   1862  HA  LYS   111       9.919  -
3.660   9.972  1.00  0.00      BrD ATOM   1863  CB  LYS   111       8.989  -
5.308  10.972  1.00  0.00      BrD ATOM   1864  HB1 LYS   111       9.742  -
5.373  11.743  1.00  0.00      BrD ATOM   1865  HB2 LYS   111       8.661  -
6.304  10.718  1.00  0.00      BrD ATOM   1866  CG  LYS   111       7.801  -
4.542  11.528  1.00  0.00      BrD ATOM   1867  HG1 LYS   111       7.127  -
4.304  10.718  1.00  0.00      BrD ATOM   1868  HG2 LYS   111       7.293  -
5.162  12.252  1.00  0.00      BrD ATOM   1869  CD  LYS   111       8.237  -
3.252  12.203  1.00  0.00      BrD ATOM   1870  HD1 LYS   111       8.872  -
2.701  11.525  1.00  0.00      BrD ATOM   1871  HD2 LYS   111       7.361  -
2.666  12.437  1.00  0.00      BrD ATOM   1872  CE  LYS   111       9.006  -
3.527  13.485  1.00  0.00      BrD ATOM   1873  HE1 LYS   111      10.044  -
3.698  13.239  1.00  0.00      BrD ATOM   1874  HE2 LYS   111       8.597  -
4.411  13.952  1.00  0.00      BrD ATOM   1875  NZ  LYS   111       8.916  -
2.389  14.442  1.00  0.00      BrD ATOM   1876  HZ1 LYS   111       9.335  -
2.656  15.356  1.00  0.00      BrD ATOM   1877  HZ2 LYS   111       7.921  -
2.127  14.593  1.00  0.00      BrD ATOM   1878  HZ3 LYS   111       9.428  -
1.565  14.066  1.00  0.00      BrD ATOM   1879  C   LYS   111      10.828  -
5.465   9.289  1.00  0.00      BrD ATOM   1880  O   LYS   111      11.964  -
5.112   9.607  1.00  0.00      BrD ATOM   1881  N   GLU   112      10.585  -
6.549   8.561  1.00  0.00      BrD ATOM   1882  HN  GLU   112       9.658  -
6.780   8.344  1.00  0.00      BrD ATOM   1883  CA  GLU   112      11.662  -
7.407   8.085  1.00  0.00      BrD ATOM   1884  HA  GLU   112      12.330  -
7.588   8.914  1.00  0.00      BrD ATOM   1885  CB  GLU   112      11.098  -
8.745   7.600  1.00  0.00      BrD ATOM   1886 HB1  GLU   112      10.589  -
8.589   6.661  1.00  0.00      BrD ATOM   1887 HB2  GLU   112      11.917  -
9.432   7.445  1.00  0.00      BrD ATOM   1888  CG  GLU   112      10.120  -
9.383   8.573  1.00  0.00      BrD ATOM   1889 HG1  GLU   112      10.678  -
9.856   9.367  1.00  0.00      BrD ATOM   1890 HG2  GLU   112       9.489  -
8.611   8.987  1.00  0.00      BrD ATOM   1891  CD  GLU   112       9.240  -
10.425   7.912  1.00  0.00      BrD ATOM   1892  OE1 GLU   112       9.625  -
10.932   6.837  1.00  0.00      BrD ATOM   1893  OE2 GLU   112       8.165  -
10.734   8.468  1.00  0.00      BrD ATOM   1894  C   GLU   112      12.447  -
6.739   6.960  1.00  0.00      BrD ATOM   1895  O   GLU   112      13.583  -
7.120   6.677  1.00  0.00      BrD ATOM   1896  N   ALA   113      11.840  -
5.744   6.318  1.00  0.00      BrD ATOM   1897  HN  ALA   113      10.932  -
5.486   6.579  1.00  0.00      BrD ATOM   1898  CA  ALA   113      12.492  -
5.046   5.216  1.00  0.00      BrD ATOM   1899  HA  ALA   113      13.355  -
5.620   4.936  1.00  0.00      BrD ATOM   1900  CB  ALA   113      11.573  -
4.989   4.008  1.00  0.00      BrD ATOM   1901 HB1  ALA   113      11.649  -
5.914   3.455  1.00  0.00      BrD ATOM   1902 HB2  ALA   113      11.865  -
4.166   3.373  1.00  0.00      BrD ATOM   1903 HB3  ALA   113      10.554  -
4.848   4.336  1.00  0.00      BrD ATOM   1904  C   ALA   113      12.953  -
3.645   5.624  1.00  0.00      BrD ATOM   1905  O   ALA   113      13.778  -
3.035   4.943  1.00  0.00      BrD ATOM   1906  N   GLY   114      12.435  -
3.146   6.743  1.00  0.00      BrD ATOM   1907  HN  GLY   114      11.790  -
3.678   7.255  1.00  0.00      BrD ATOM   1908  CA  GLY   114      12.833  -
1.836   7.229  1.00  0.00      BrD ATOM   1909 HA1  GLY   114      12.506  -
1.732   8.253  1.00  0.00      BrD ATOM   1910 HA2  GLY   114      13.911  -
1.769   7.200  1.00  0.00      BrD ATOM   1911  C   GLY   114      12.252  -
0.695   6.414  1.00  0.00      BrD ATOM   1912  O   GLY   114      12.991
0.085   5.813  1.00  0.00      BrD ATOM   1913  N   LEU   115      10.927  -
0.590   6.405  1.00  0.00      BrD ATOM   1914  HN  LEU   115      10.398  -
1.231   6.921  1.00  0.00      BrD ATOM   1915  CA  LEU   115      10.244
0.482   5.683  1.00  0.00      BrD ATOM   1916  HA  LEU   115      10.991
1.195   5.369  1.00  0.00      BrD ATOM   1917  CB  LEU   115       9.523  -
0.066   4.442  1.00  0.00      BrD ATOM   1918 HB1  LEU   115       8.622  -
0.563   4.768  1.00  0.00      BrD ATOM   1919 HB2  LEU   115       9.240
0.773   3.824  1.00  0.00      BrD ATOM   1920  CG  LEU   115      10.312  -
1.047   3.570  1.00  0.00      BrD ATOM   1921  HG  LEU   115       9.929  -
1.000   2.565  1.00  0.00      BrD ATOM   1922 CD1  LEU   115      10.120  -
2.469   4.061  1.00  0.00      BrD ATOM   1923 HD11 LEU   115      10.216  -
3.149   3.228  1.00  0.00      BrD ATOM   1924 HD12 LEU   115       9.137  -
2.571   4.493  1.00  0.00      BrD ATOM   1925 HD13 LEU   115      10.868  -
2.699   4.804  1.00  0.00      BrD ATOM   1926 CD2  LEU   115      11.790  -
0.683   3.517  1.00  0.00      BrD ATOM   1927 HD21 LEU   115      12.358  -
1.397   4.094  1.00  0.00      BrD ATOM   1928 HD22 LEU   115      11.932
0.306   3.924  1.00  0.00      BrD ATOM   1929 HD23 LEU   115      12.127  -
0.701   2.491  1.00  0.00      BrD ATOM   1930  C   LEU   115       9.246
1.193   6.603  1.00  0.00      BrD ATOM   1931  O   LEU   115       9.407
1.183   7.823  1.00  0.00      BrD ATOM   1932  N   ILE   116       8.209
1.801   6.018  1.00  0.00      BrD ATOM   1933  HN  ILE   116       8.131
1.787   5.043  1.00  0.00      BrD ATOM   1934  CA  ILE   116       7.196
2.518   6.794  1.00  0.00      BrD ATOM   1935  HA  ILE   116       7.614
3.470   7.083  1.00  0.00      BrD ATOM   1936  CB  ILE   116       5.930
2.786   5.956  1.00  0.00      BrD ATOM   1937  HB  ILE   116       5.183
3.218   6.605  1.00  0.00      BrD ATOM   1938 CG1  ILE   116       5.388
1.480   5.367  1.00  0.00      BrD ATOM   1939 HG11 ILE   116       4.697
1.713   4.570  1.00  0.00      BrD ATOM   1940 HG12 ILE   116       6.209
0.904   4.968  1.00  0.00      BrD ATOM   1941 CG2  ILE   116       6.228
3.786   4.850  1.00  0.00      BrD ATOM   1942 HG21 ILE   116       5.309
4.261   4.538  1.00  0.00      BrD ATOM   1943 HG22 ILE   116       6.671
3.271   4.010  1.00  0.00      BrD ATOM   1944 HG23 ILE   116       6.914
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4.534   5.217  1.00  0.00      BrD ATOM   1945  CD1 ILE   116       4.662
0.615   6.373  1.00  0.00      BrD ATOM   1946  HD11 ILE  116       3.870
0.073   5.875  1.00  0.00      BrD ATOM   1947  HD12 ILE  116       4.240
1.238   7.147  1.00  0.00      BrD ATOM   1948  HD13 ILE  116       5.356      -
0.086   6.812  1.00  0.00      BrD ATOM   1949  C   ILE   116       6.802
1.751   8.053  1.00  0.00      BrD ATOM   1950  O   ILE   116       7.024
0.544   8.154  1.00  0.00      BrD ATOM   1951  N   ASP   117       6.222
3.424   8.874  1.00  0.00      BrD ATOM   1952  HN  ASP   117       6.079
1.862  10.275  1.00  0.00      BrD ATOM   1953  CA  ASP   117       5.805
2.585  10.798  1.00  0.00      BrD ATOM   1954  HA  ASP   117       5.197
0.609  10.013  1.00  0.00      BrD ATOM   1955  CB  ASP   117       4.967      -
0.267  10.220  1.00  0.00      BrD ATOM   1956  HB1 ASP   117       5.564      -
0.596   8.976  1.00  0.00      BrD ATOM   1957  HB2 ASP   117       4.664
0.555  10.876  1.00  0.00      BrD ATOM   1958  CG  ASP   117       3.722
1.488  10.787  1.00  0.00      BrD ATOM   1959  OD1 ASP   117       2.897
0.421  11.641  1.00  0.00      BrD ATOM   1960  OD2 ASP   117       3.572      -
1.506  11.154  1.00  0.00      BrD ATOM   1961  C   ASP   117       7.006      -
0.892  12.209  1.00  0.00      BrD ATOM   1962  O   ASP   117       6.846
2.384  10.725  1.00  0.00      BrD ATOM   1963  N   LYS   118       8.206
1.897   9.879  1.00  0.00      BrD ATOM   1964  HN  LYS   118       8.282
1.613  11.488  1.00  0.00      BrD ATOM   1965  CA  LYS   118       9.416
2.063  10.968  1.00  0.00      BrD ATOM   1966  HA  LYS   118      10.248
2.220  12.489  1.00  0.00      BrD ATOM   1967  CB  LYS   118       9.315
1.654  13.149  1.00  0.00      BrD ATOM   1968  HB1 LYS   118       8.536
2.159  13.845  1.00  0.00      BrD ATOM   1969  HB2 LYS   118      10.292
3.656  12.996  1.00  0.00      BrD ATOM   1970  CG  LYS   118       8.818
3.719  12.911  1.00  0.00      BrD ATOM   1971  HG1 LYS   118       7.921
3.946  13.911  1.00  0.00      BrD ATOM   1972  HG2 LYS   118       8.595
4.608  12.327  1.00  0.00      BrD ATOM   1973  CD  LYS   118       9.857
4.972  13.133  1.00  0.00      BrD ATOM   1974  HD1 LYS   118      10.477
4.075  11.613  1.00  0.00      BrD ATOM   1975  HD2 LYS   118      10.468
5.794  11.631  1.00  0.00      BrD ATOM   1976  CE  LYS   118       9.068
5.425  10.902  1.00  0.00      BrD ATOM   1977  HE1 LYS   118       8.500
6.386  12.369  1.00  0.00      BrD ATOM   1978  HE2 LYS   118       8.697
6.652  10.943  1.00  0.00      BrD ATOM   1979  NZ  LYS   118      10.212
6.458  11.316  1.00  0.00      BrD ATOM   1980  HZ1 LYS   118      11.163
7.656  11.096  1.00  0.00      BrD ATOM   1981  HZ2 LYS   118       9.989
6.459   9.921  1.00  0.00      BrD ATOM   1982  HZ3 LYS   118      10.206
0.110  11.591  1.00  0.00      BrD ATOM   1983  C   LYS   118       9.657
0.641  10.802  1.00  0.00      BrD ATOM   1984  OT1 LYS   118       9.047      -
0.302  12.459  1.00  0.00      BrD END    1985  OT2 LYS   118      10.454      -
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